

NOVELLÉ Supplement Series



The Unaccented Vowels of Proto-Norse

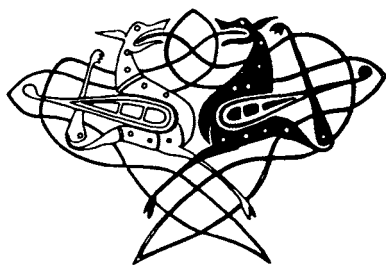
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Martin Syrett

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OF PROTO-NORSE

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0. INTRODUCTION

This study attempts to describe the phonological status and development of post-tonic unaccented vowels in the Scandinavian dialects spanning roughly the period from the late 2nd century AD, when vernacular written evidence first becomes available, up until the end of the older runic period and the beginning of the transitional period, which in real time is probably to be dated to the 6th century. The progression of enquiry consists of first a synchronic and then a diachronic approach. On the basis of the primary evidence left to us, and the secondary evidence deducible from a comparative viewpoint, it is attempted to establish the unaccented vowel system of proto-Norse. Each chapter examines one class of evidence at a time to assess what information it can supply us with, until finally these results are integrated in the final chapter into a diachronic scheme. Since at the moment linguistic theory, at least phonological theory, seems to be more at ease with synchronic than diachronic descriptions, these results are necessarily of a tentative nature. My approach, basically the eclectic philosophy of a text- rather than theory-based philologist, should become clear in the course of the work and the brief discussion in chapter 1.

Naturally the whole work is founded on the belief that not only are there still significant gaps in our understanding of this subject, which would be undisputed, but also that new meaningful insights can be gleaned from the same evidence that has been strenuously and minutely examined by scholars for more than a century, and so would for the most part seem to have exhausted its capacity to surprise, or at least to surprise productively. To take a particularly apt example, it is true that rather few convincing breakthroughs have been made recently in the field of interpreting early runic inscriptions, but that even in this area new advances are still possible is demonstrated by Santesson's reworking of the opening of the Stentoften

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inscription, which strikes me as both provocative and plausible.¹ In addition, I have tried to keep in mind the dialectal range of the evidence available, since, although possibly useful for conciseness and ease of reference, the continual emphasis placed upon classical Old Icelandic for the study of common Norse seems an unfortunate development in post-Neogrammarian historical linguistics.² Therefore I feel confident that if this book fails to make any useful contributions to the field, it is due to the limitations of its author rather than the subject.

1. 1989:226-28.

2. For a useful illustration of this, see the vast post-1960s debate on *i*-umlaut, neatly summarized in Benediktsson 1982:2-38, and the comments passed below §7.6.4.

1. QUESTIONS OF METHOD AND THE NATURE OF THE EVIDENCE

1.0. *The sources of evidence*

This chapter is concerned with the problems of methodology as regards the sources of evidence available to us. Although it makes no attempt to formulate definitive answers to any of the issues, it is not intended to act merely as a preliminary discussion to the main text. Instead the premises and assumptions on which the work is founded will be discussed here and subsequently taken for granted.

The sources for the period in question are disparate and some are naturally more reliable and informative than others. It is unavoidable in any study of a bygone language that the evidence available is wholly insufficient for the linguist's needs, since it falls short of the standards at our disposal for the study of modern-day languages. However, although it is therefore necessary to scrape together every possible shred of evidence, this is not to say that each source is as valid as any other, and inevitably some kinds will be given more relative prominence than others. Here I will briefly sketch the types of evidence available, some of the authorities and editions who I rely on for this evidence, the problems and pitfalls involved in interpreting it, and the relative weight to be attached to it.

1.1. *Comparative evidence*

Under this heading I include all forms of non-direct linguistic evidence except for loanwords. It is possible to split this category into distinct types, each of which has its own contribution to make.

1. Questions of method and the nature of the evidence

1.1.1. *Backwards reconstruction.* By this is meant the vast pool of material unearthed by comparative Indo-European studies which are not inferrable, at least not in a non-circular fashion, from the data itself. When dealing with the older period of runic writing, where our understanding is limited and the connection with the timeless reconstructed languages may reasonably be felt to be closer, this field is of great importance. Naturally enough in a study of this scope there has been no space to discuss in detail early proto-Norse as it is usually reconstructed on the basis of the Germanic languages, whilst still less has justice been done to the wider Indo-European field.

Instead the following chapters attempt to marry the traditional, or possibly just least controversial, reconstructions with the data that we can actually derive directly from the texts, and to check how they mesh. This is not to imply that I blindly follow a middle-of-the-road compromise reconstruction and disregard the consequences, claiming ignorance as a mitigating factor. On those occasions where I have found it necessary to question, or just merely to clarify my position on, a certain phenomenon, I have done so. Rather I hope to have proceeded with a general healthy scepticism towards the process of comparative reconstruction as a companion in adversity. Since in principle there are normally a plethora of ways in which a reconstructed stage **A* can develop to stage **B*, the usual criteria for deciding which theoretical route is the best are those of economy and simplicity, i.e. those involving the fewest and most 'natural' steps. This is of course methodologically correct, in that there is no other way to study diachronic developments of this nature without resorting to whimsical chaos. It does not follow, however, that they necessarily coincide with the historical facts, as it is clear from attested languages that sound-changes frequently do not subscribe to the Euclidian notion that the best or quickest way between two points is a straight line.¹ In addition the

1. This point is well made by Schmalstieg 1983:151, who notes that 'it is inherently more reasonable to suppose gradually changing economies than the simple equations of traditional Indo-European grammar. These were based on the belief that one

1.1. Comparative evidence

simplicity factor is often unconvincing given the continuing controversy over how to define a 'natural' as opposed to a 'non-natural' change without arguing in a neat circle.

As a consequence the prevailing method has been to regard Indo-European and Germanic reconstructions as simply that, reconstructions on a page which do not necessarily have any relevance to attested Norse. An example is the perpetual debate over the matter of a possible bi- vs. tri-moric distinction in proto-Germanic unaccented syllables, which has been ignored here as irrelevant. As a descriptive device to account for certain phonological equations amongst the Germanic dialects these features may be valid, but this does not mean that they are necessarily to be assumed to have had any phonetic reality. In fact, I prefer to side with those scholars who have found it desirable to eliminate this feature from the reconstruction of Indo-European: it seems to be an example of reductive reasoning run riot.² It follows that I can afford little sympathy to the once popular notion of deriving the Scandinavian word-tones from Indo-European tonic patterns.³ This notion of the development may well be justified in the limited sense that it interprets tonic differences as linguistically functional alongside stress from proto-Indo-European down into modern Swedish and Norwegian. However, the benefits of such an approach seem wholly illusory, since no functional correlation exists, any more than exists between the I-E segment **t* and modern Norwegian /t/. This theory seems to amount to nothing more than a statement that

should introduce analogy only when sound laws fail. But there is no evidence that analogy and contaminations are less likely than the formulaic sound laws. The reason for the neo-grammarians' notion is that it is somehow less haphazard, easier to control, easier to fit into a simple scientific rule'. He also reflects further in 1980:4 that 'there is no known reason why a simple hypothesis should be more in accord with historical reality than a complex one.' Possibly the solution to the dilemma is that historical linguistics cannot really concern itself with 'historical reality', only with a theoretical matrix of connected 'facts'.

2. For surveys as regards Germanic, see Lane 1963 and Kortlandt 1986a:155-56.
3. See the comprehensive references in Liberman 1982:§17.

1. Questions of method and the nature of the evidence

differences of pitch could be distinctive at some levels and in some functional capacities both in Indo-European and also in some modern Scandinavian dialects, but as such is scarcely rigorous enough to be of interest to a phonologist.

1.1.2. *Forwards reconstruction.* This involves working back from what is attested in the modern Scandinavian dialects to infer the earlier state of affairs. As a result such reconstructions are based on a more secure footing, but once again the primacy of contemporary evidence must be stressed. Even with developments which can apparently be dated to the period of Old Norse syncope, such as breaking and *i*- and *u*-umlaut, we find dialectal differences in application and distribution which clearly warn against taking the concept of common Old Norse too literally. Likewise, despite the uneasiness rife concerning Sapir's notion of 'drift', it is difficult to dispute the observation that there are cases where languages which appear to have separated (whatever that may mean in sociolinguistic terms) participate in common innovations.⁴

This is not designed to destroy the credibility of internal reconstruction in the minds of either the writer or the reader, since it is plainly an indispensable tool given that no writing system has ever reflected the language it portrays as fully as a linguist might wish for. Nevertheless, a reminder that this method is neither infallible, nor even particularly attractive, is useful.⁵ As will hopefully become clear later (§9.1.2), I believe, for example, that an over-rigid reductionist approach has pushed the onset of the famed 3-way unaccented vowel triangle of Old Norse far earlier into the history of the Scandinavian dialects than is actually justified.

4. See Sapir 1921 chapters 7 and 8, also Sommerstein 1977:257-59.

5. For some cogent, if possibly exaggerated, arguments against reconstruction along traditional lines, see Liberman 1982:207-08 on intelligent guessing.

1.1. Comparative evidence

1.1.3. *Sideways reconstruction*. Finally, this refers to the notion that parallel developments in related languages are indicative of some sort of common tendency in the languages concerned. As it nearly always involves the implicit acceptance of drift in the relevant cases, it can perhaps best be seen as establishing some sort of typology favoured by related languages, as for instance in the parallel development of umlaut harmonies and diphthongs by breaking in Old Norse and Old English. However, despite its surface attractiveness this type of reasoning remains a dubious tool and one which is very difficult to quantify. Whilst it is very easy to point to the development of svarabhakti vowels before final liquids in Old English, Old High German and Old Norse as being 'related', it is rather difficult to understand what this actually means or in what way this deepens our understanding of the process. This is especially relevant given that in this instance, as in most cases, the similarities are only vague and typological. The nearer we approach the data, the less agreement we find between the various developments in the various dialects.

The last point about comparative reconstruction is that, since it is so difficult to quantify, it must be stressed as a methodological condition that states which are closer in the reconstructive chain be given priority over those further away. This is possibly one explanation for the relative unreliability of sideways comparisons, in that they effectively entail reconstruction backwards to a certain point in time where the two languages may be considered roughly unitary, and then forward again along different avenues of development, thus doubling the risk of the linguist misunderstanding or misjudging the processes at work. As an example of the problems involved, it is interesting to note that in his excellent study of Norse svarabhakti phenomena, Bo Ralph argued that Old Swedish epenthesis was particularly hindered after dental consonants and quoted OE and OHG parallels showing the same phenomenon.⁶ However, an example closer to home might have been Kolsrud's observation that in the

6. 1975:52-53.

1. Questions of method and the nature of the evidence

Norwegian manuscript under his examination parasite vowels developed more commonly after dentals.⁷ Not only are typological parallels of little value when confronted with a counter-example, but in this case surely the Norwegian example must be given more weight, being closer both chronologically and dialectally. The final irony is, of course, that sideways comparison does not really provide any firm support for the argument either way.

1.1.4. *Reconstruction at work.* Despite these reservations, comparative evidence has in fact been extensively used throughout the text, simply due to the fact that there is no other way to gain any insight into the language of the early inscriptions, and because the evidence is naturally only comprehensible within a larger framework. These comments are merely to provide some sort of backdrop to the frequent quoting of forms from other languages and to assess the relevance of such evidence.

1.1.5. *Philology and theoretical linguistics.* Since this is primarily a phonological study, a final word must be added on my theoretical standpoint among the multitude of linguistic approaches currently on offer to the budding philologist. For the most part use has been made of any of the more abstract linguistic theories only in the final summary chapter, since it is only there that vowel systems have been discussed divorced from their attested contexts, and to have invoked them during the preceding sections would have tended to prejudice our view of the evidence. The occasional recourse to generative phonology, usually in its more 'natural' incarnations, has been taken for granted, whereas for some of the more recent theoretical developments, such as autosegmental or metrical phonology, references to relevant handbooks are given.

7. 1917:284 note 2, although admittedly his data does appear to be open to other interpretations.

1.2. Runic evidence

On the other hand, much of the time the terminology has been left deliberately vague so as not to supply hostages of fortune by making explicit claims about features which are not under direct scrutiny. It is partly on these grounds that, for instance, the usual reference to vowel segments is along the lines of *a* rather than /a/, although a further reason might be the desire to avoid the intellectual baggage of structuralist thought implicit in the use of such slashes. Whilst it seems useful in a study of the relationship between individual vocalic segments to adopt many of the methods of phoneme and distinctive feature theory, it strikes me that it is more necessary yet to have a clear mental conception of the structure of a vowel system than merely to hide confusion amongst the typographical trappings of an explicit theory. Having said that, I believe my approach has been sufficiently rigorous phonologically and that any ends left loose in the main body of the text are tied up in the summary, or if not that I at least confess my inability to tie them up at some point.

1.2. *Runic evidence*

The runic inscriptions are the only direct source of evidence for the period under study. Of wide diachronic and diatopic distribution, this corpus is to be treated with great caution, naturally enough given the nature of its survival down through the ages to us. In the first place, hundreds of years embedded in corrosive soil or subject to all the hazards of wind and rain is not the ideal environment for the preservation of clear and unambiguous readings. Secondly, we have no clear idea of the origin of any spelling tradition which might underly the early runic orthographic system, nor of how runesmiths throughout the ages learnt and practised their craft. But the most serious problem in tackling the early inscriptions undoubtedly involves simply working out the meaning hidden in them.

1. Questions of method and the nature of the evidence

1.2.1. *The older runic inscriptions.* For the reconstruction of proto-Norse our corpus consists of inscriptions in the elder and transitional futharks, many of which remain extremely enigmatic. The reasons for this are easy to lay hands on. Separated by a large distance in time, we are inevitably dealing with texts representing a language which for us is only accessible in asterisked reconstructions. In the same way the gap in time becomes socially and mentally a gap in reality; we often have no way of taking the first all-important step in deciphering texts, namely that of pre-guessing what they are likely to be about. This is compounded by the fact that many of the inscriptions of this early period are found on loose artefacts, so divorced from the predictable but comprehensible later commemorative runestone phase. Apart from the assumption of personal names, there is little external rationalisation that can be brought to bear to decide what sort of message was likely to be inscribed on an archaeological find from a grave mound or bog. This has prompted counsels of wisdom/despair as to whether further speculation about the interpretation of much-pondered but still mysterious texts is desirable or even justified.⁸

Although I have tried to exercise due caution, I hope that my attitude, optimistic or naïve depending on the reader's perspective, is made clear by the positive reference in the preface to Santesson's recent article on the Stentofte stone. Nevertheless, a few comments are in order to illustrate the basic methodological approach taken here to interpretations ranging from the plausible, but undemonstrable, to the fantastic. Firstly, what should define semantic plausibility within an interpretation? Since no discrete answer is likely to be forthcoming, the course adopted must surely be to assess the proposed meaning within its social and historical context. But this is scarcely an advance, since the pages of reliable information on this subject are as blank as they are for the linguistic situation of the period. It is possible to appeal to common sense, but this leads to a critical apparatus

8. See Page's 1970 review of N.Å. Nielsen 1968.

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based on intuition.⁹ Therefore special weight should possibly be given to those rare instances where an inscription can actually be related to an external context, since such a valuable stroke of good luck should not be discarded without reason; the Möjbro stone is a good example, where according to some interpretations, at least, the adjacent picture illustrates the text (cf. below §5.1.1).

Aside from this, interpretations must be judged on how well they fit with our linguistic (pre-)conceptions. Since this is primarily a phonological study of inflectional syllables, I have endeavoured to gather the raw data in as non-circular a way as possible. Therefore the principle has been adopted that, in general, an attested form must have an interpreted context to gain some non-arbitrary hold on its syntactic function and inflection. If none such is forthcoming, then either the interpretation of the specific form is rejected, or, if accepted, then it is on the proviso that it provides only circumstantial evidence and cannot be used as proof of any linguistic factor, although it may be used for testing subsequent to a hypothesis being advanced on the basis of non-circular data. An apposite example, although there are many others, would be Ottar Grønvik's interpretation of the form **hakupo** on the Noleby stone (cf. below §5.6). On formal grounds I find the reading of this form as the precursor of an OI fem. acc.sg. adjective **hákunna* plausible. However, since there is no convincing syntactic context for it, it does not provide any evidence for the reconstruction of this ending in proto-Norse. It is surprising how much of our corpus fits into this category, and how many forms are used as evidence for our reconstructions in a wholly circular fashion. A form identified solely on formal phonological grounds can only with great caution then be used as evidence for a phonological description.

9. Although in a sense all argument is intuitive, in that it can be reduced to the same 'fact(s)' or basic assumptions which are prime as far as we can understand them, and yet two opponents can simply draw different conclusions based on their own personal experience or prejudices, etc. The problem with evaluating interpretations is that this stage is rather nearer the surface of the logical argument than is usually the case.

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1.2.1.1. *Runic orthography*. Moving on from semantic interpretation, a further difficult issue is in understanding the processes by which the carvers of inscriptions translated their speech into runes, given that no established spelling system can be demonstrated for the genesis of runic writing in the north.¹⁰ In any discussion of this subject the ideographic function of runes and the acrophonic principle by which they may have worked is likely to be to the fore. The notion of a typical runesmith using his list of rune-names as a reference point for the phonetic value of a particular symbol is a very useful and common one which needs no reiteration here.¹¹ Use of a script naturally requires training and practice, and that this should involve learning a list of rune-names, with the initial sound of each representing the value of its rune, seems a very plausible model for early runic orthography.

However, ideas about schooling or apprenticeships in rune-carving can be carried too far, and it strikes me that the notion of a runic *koine* language during the elder futhark period is particularly misguided and turns a blind eye to the facts of the matter. Given the limitations of our understanding of the inscriptions, it seems premature to theorise about a ‘Verwendung einer Art von “Koine” oder “Lingua Franca” durch die alten Runenmeister sowie deren Schüler und Nachbildner’.¹² I have already noted the difficulties involved in determining on extra-linguistic grounds what is likely to have been written in these texts, yet in the absence of such clues the majority of interpretational work is likely to be at least partly guesswork and run the risk of simply supplying any such sense as is appropriate for the spelling. When, despite this freedom within which to work, the mysteries of large proportions of the early runic corpus remain (effectively) unsolved, our approach does not inspire confidence. Without

10. Unlike, say, the introduction of the roman alphabet into Scandinavia, which was clearly and naturally modelled on the established Latin and vernacular orthographic systems of the Germans and English.

11. See Liestøl 1981:250-53.

12. Krause 1971:§1; for a discussion of the *koine*, see below §2.1.1.

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wishing to make cheap points of individual cases, a good example would be the successive readings of the Fonnås clasp offered by Sophus Bugge, Carl Marstrand and Ottar Grønvik.¹³ I have nothing but admiration for such sterling pieces of reconstruction, but at the same time, like, I suspect, many others, would not trust them as a firm basis for further work, since they confirm the suspicion that, when freed from the restraints of a given semantic field and allowed to wander unchecked among the enticing fields of etymology, virtually any series of letters containing some consonants and some vowels can be forced into sense.¹⁴ I therefore see no future, or indeed any gain for the present, in identifying a sterile orthographic norm within a half-interpreted corpus, when it is only on the basis of our standard reconstructions that we can gain any hold at all on these inscriptions.

This seems to lead on to the working methodology that runesmiths spelt as they spoke. Although naturally this should not be taken absolutely literally, it does seem a fair starting point, and it does happen to have become an increasingly popular approach towards the later period of runic inscriptions.

1.2.1.2. *The chronology of the inscriptions.* One further note must be made here on the subject of runic palaeography and its (ab-)use in setting up relative chronologies. It has long been accepted, although rather less often explicitly stated, that a certain common trend can be identified in the history of the rune-shapes of the elder futhark. There are two features apparent in the basic typological progression. Firstly, the rune-shapes tend to strive to level out differences in height, and so the smaller runes tend to

13. NIÆR I:50-70, Marstrand 1965, espec. part 7, 1965:266-75, and Grønvik 1987:§§5-8.

14. Cf. the comments in Haavaldsen 1991:63. Similar reservations are noted by Barnes 1991:229-32 on the value of the various incompatible interpretations proposed for the Malt stone almost immediately upon its discovery, where he observes 'there is no objective criterion I can discern that would enable me to determine which of the two — if either — is likely to be right'.

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be enlarged.¹⁵ Secondly, many have identified a drive to give each rune-shape a single vertical stave and eliminate instances where only obliquely angled branches made up the form.¹⁶

Scholars have tended to latch upon some rune-shapes in particular in the belief that they display just such typological progressions upon which judgements on the antiquity (or otherwise) of inscriptions can be made. Good examples which appear to follow these principles are the *j*-rune,¹⁷ the *k*-rune,¹⁸ the *s*-rune¹⁹ and the *e*-rune.²⁰ This is in principle a justified procedure, and the relative chronology of later runic inscriptions as well as of the incipient manuscript tradition has long been established on the basis of such a typological chronology into which the attested evidence was slotted at neat intervals.²¹ Nevertheless, dangers lurk in every crevice, as

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15. Odenstedt 1985:6-8 reaffirms in opposition to Westergaard 1981 that the original forms of the *k*- and *j*-runes were smaller than the average, and that one of the typological drives was to make all runes of equivalent height. However, as Barnes 1984:68 points out, early forms of the *j*-rune such as that on the Nøvling brooch appear fairly full-sized, and the typology can therefore only involve a progression from variation to regularisation in favour of the full-size shapes.
 16. For example Moltke 1985:179.
 17. The oldest forms in  and  are first replaced by full-height variants such as  and later a stave is added to form  and the like.
 18. The early  shape is first enlarged to full uniform height, and a stave is also added to form . This then develops further to  in the younger futhark.
 19. The earlier *vieleckige* shapes such as , often with even more bends, are supposed to be simplified to the *zweieckig* form  and then further straightened up to the Viking age .
 20. Which seems to exhibit a progression from the flat-topped  to the crooked .
 21. For an attempt to relate rune-forms to the archaeological datings as they were then established, see von Friesen 1924:24-33; an updated summary is given by K.M. Nielsen 1970. All of these rune-shapes are subjected to enquiry by Odenstedt 1990; unfortunately much in his methodology is so dubious that I have felt unable to draw on his work to any significant degree, especially for current purposes his reliance on relative datings which are essentially guesswork; see the criticisms in Williams 1992:195-98.

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anyone who examines the grounds for the relative datings in Krause and Jankuhn's corpus will readily admit. In the first place, the evidence is sparse, especially when we consider that to minimise the risk of confusing diatopic and diachronic differences a fair body of material from one locale is ideal; this is plainly not easy to come by in the field of the elder futhark inscriptions. Also, although such proposed typological developments may well reflect a general trend, they can only be relied upon within a rough and vague framework. Once attempts are made to differentiate between fine distinctions on the way, the problem becomes intractable.

These difficulties can be illustrated by the problem of the development of the *j*-rune. Discussing the Nøvling rosette fibula, which is archaeologically datable to the 3rd century, Krause notes that the same form of the *j*-rune is found specifically on some of the earliest runestones, rather than on movable objects.²² But when we look at these early runestones, we find that on various grounds, mostly typological and in fact as often as not simply due to the form of the *j*-rune itself, their inscriptions are dated by Krause to the 5th century. In particular, they are certainly thought of as typologically younger than, for instance, the form of the *j*-rune on the Tune stone, which is conventionally dated to the second half of the 4th century. This complicates the issue. At the least it suggests either that the variants of the *j*-rune are not in fact diagnostic, or that the usual practice of dating the runestone tradition as starting in the late 4th century because they exhibit typologically younger forms is in fact a non-starter. Whilst I have no axe to grind as regards pushing the datings of the older runic inscriptions further and further back into the Roman Iron age, it is easy to feel sympathy with those who point out that there are in fact no good reasons backing up any assumption that the runestone inscriptions are later than those on the earliest loose objects.²³ There seems to be no viable

22. KJ:38; the runestones are KJ 64 Barmen, KJ 65 Nordhuglo, KJ 73 Rō and KJ 91 Tørvika A.

23. See, for instance, the comments along these lines in Antonsen 1975b:11 and 1987:25.

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reason not to assume that the early runestones are of an age with the early bog finds, whilst on the other hand such an assumption clearly remains undemonstrable.

The point remains, however, and has been confirmed by the recent discovery of more evidence. In the inscriptions from the bog-finds at Illerup, in an archaeological context dated to c. 200, the only two attested *j*-runes were both of the elongated curved type found, for example, on the Kårstad stone,²⁴ and yet the typological youth of exactly this rune-form led Krause to conclude that the Kårstad inscription could not be earlier than the 5th century.²⁵ This brings us neatly on to an important qualification in the use of such typological arguments. It is necessary to keep in mind that different palaeographic features may have been favoured on a regional rather than diachronic basis, and also in particular that differences may be assumed to have existed dependent upon the medium in which the runes were inscribed. An example is quite probably the *s*-rune, where the typologically simpler shapes with two or three crooks are standard in the stone inscriptions as opposed to the many-crooked squiggles which pass for *s*-runes on metal. It seems perfectly likely that this indicates no diachronic progression, but rather reflects the fact that carving in stone is more arduous.²⁶

1.2.1.2.1. *Reasons for (not) dating runic inscriptions.* Although I think these are good examples for demonstrating on what shaky ground our current grasp of the development of rune-shapes in the elder futhark rests, a reasonable defence could be put forward, namely that these points do not invalidate the procedure itself, they merely entail revision of the details reached by that procedure. This is fair enough, but the points made above

24. For the rune-shapes see Stoklund 1987:285.

25. KJ:121.

26. See below §5.1.2 and §5.4 on the Möjbro stone; because this inscription contains an *s*-rune in the form *ʃ* is no reason to place it late in the runestone tradition.

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still hold good. Especially as regards fairly minor details of execution of what appear to be typologically equivalent rune-shapes, we must take account of the different styles likely to have been available for work at different places and on various surfaces. Since unfortunately we do not have sufficient evidence for many of these putative distribution types to be identified, simple caution will have to be the watch-word.

1.2.1.2.2. *Archaeology and chronology.* I am not of course trying to suggest that there is no way to work out a chronological scheme for the runic inscriptions in the elder futhark, which would be taking scepticism to an extreme. It is merely that to do so on linguistic and runological grounds a fair weight of probability must be established on the basis of a number of features. Likewise, since archaeological dating is the only handle we have on any form of absolute chronology, it is desirable to refer as directly as possible to such external fixed points as we can muster. Although in a sense archaeological dating is often only possible on the basis of a pre-existing typological chronology as well, in certain instances quite precise fixed points have been worked out; for instance, the Illerup bog-finds have been dated with some reliability to around c. 200 AD on the basis of the Roman *denarii* found there.²⁷ After decades of debate and uncertainty, archaeologists seem to have reached some kind of agreement on the dating of the bracteates too.²⁸ It is only by relating a sufficient number of diagnostic features within inscriptions to archaeological contexts that advances in the field of dating can reliably be made.

This brief account has attempted to show just some of the difficulties to be faced up to in the tricky business of dating runic inscriptions on internal grounds. Therefore arguments which actually rely on a relative chronology

27. Ilkjær and Lønstrup 1983:112-13.

28. For a recent survey, see Hines 1984:200-02 with references, as against K.M. Nielsen 1970:28-29.

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established on this basis are to be treated with extreme caution; interesting examples will be discussed on the way later when they actually crop up.

1.2.2. *The later runic tradition.* Although in the text I have found it desirable to make wide reference to the later inscriptions in the younger futhark, I do not intend to contribute to the debate which has recently sprung up over the nature of runic writing, specifically with regard to the Swedish material.²⁹ In general I work with an attitude very similar to that espoused by Lagman and Williams, namely minimising the importance of the notion of conservative orthography and preferring instead to pay the closest attention to the methods whereby runesmiths converted their spoken language into a series of discrete symbols. Naturally this is engineered as much towards sound method as anything, and should not be taken as an absolute.³⁰ Nevertheless, reading an inscription as it stands seems to offer a more plausible and rigorous approach than the frequent but ad hoc recourse of positing various different levels of orthographic conservatism within a single text, and in this respect my working practice is similar for elder and younger futhark inscriptions alike.

1.2.3. *Sources.* For the elder futhark inscriptions, some eclectic selection of sources has been necessary, since otherwise the demands of space required to sift through the vast plethora of proposed readings and interpretations of some of the texts would have been excessive. Essentially Wolfgang Krause and Herbert Jankuhn's *Die Runeninschriften im älteren Futhark* (KJ, 1966) has been taken as the standard along with input from other editions of the corpus such as Marstrander's 'De nordiske runeinnskrifter i eldre alfabet' in *Viking* 16 (1952) and Antonsen's *A Concise Grammar of the Older*

29. See for example Lagman 1988, Palm 1988 and Williams 1990, esp. the introduction 1990:10-14.

30. As pointed out by Barnes 1991:226-28.

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Runic Inscriptions (1975b).³¹ Various other pieces on individual inscriptions will be referred to when relevant. As I have said, restrictions of space mean that complete and satisfactory justifications of those interpretations considered acceptable as against those rejected as unreliable cannot be included, and mostly I have been forced to refer to the secondary literature for a discussion rather than to give a proper account. In general, I have attempted to use as diagnostic only inscriptions either on which a reasonable consensus has been reached or which strike me personally as distinctly plausible. The flipside is that those interpretations whose only virtue is to fill the space where a text had been formerly written off as gibberish, but which do not actually satisfy any conditions of credibility, are not used.

For the younger futhark inscriptions, the published corpora have mostly been taken at face value, ie. for Denmark *Danmarks runeindskrifter* (DR, 1942) by Lis Jacobsen and Erik Moltke, for Norway the various volumes of *Norges innskrifter med de yngre runer* (Niy, 1941 ff.), and for Sweden the series *Sveriges runinskrifter* (SR, 1900 ff.), each volume of which is separately abbreviated and referred to. These have been supplemented from various other sources. Erik Moltke's *Runes and Their Origin. Denmark and Elsewhere* (1985), translated by Peter Foote, presents the total Danish corpus including many of the newer finds. For the Swedish Viking age material the database compiled and generously distributed by the Institutionen för nordiska språk at Uppsala University has been an indispensable aid; where readings and interpretations are given which differ from those in SR this is generally the source unless stated otherwise. The Norwegian inscriptions in the western colonies are taken from the presentation by Magnus Olsen, 'Runic Inscriptions in Great Britain, Ireland and the Isle of Man' in Haakon Shetelig's *Viking Antiquities in Great Britain and Ireland* VI (1954).

31. When unspecified, references to Marstrander and Antonsen are to these works.

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Finally, I have endeavoured to use as conventional and helpful a system of transliteration as possible. For the elder futhark inscriptions the procedure is much as in Krause 1971,³² whereas for the younger I have adopted the principles used in Peterson 1989 for the sake of consistency, even though, for instance, virtually all the *o*-runes quoted are actually representative of nasalised *q*. Angled brackets as in the Vimose sheath-mount form *aw<i>ns* are used to indicate runes that are supplied in transliteration but which are not actually written. In addition word divisions have been silently introduced in accord with the interpretation I favour.

1.3. *Other types of evidence*

For the other sources which have been tapped references will be given to the relevant authorities upon which I depend. Little attempt is made to assess these authorities in the cases of non-linguistic disciplines such as archaeology and historical ethnography. On the other hand, I have felt it advisable at times to question the common uncritical use of loan-words to illustrate the history of the Nordic languages, especially those found in the Finno-Ugric and Goidelic language groups.³³ Finally, frequent reference has been made to forms in relevant dialects recorded in medieval manuscripts. As with the later runic inscriptions, there is no scope here to discuss the intricacies of such evidence, and as a result I have leant heavily on the grammars of individual languages though trying at the same time to exercise due caution, especially as regards *hapax legomena* and ghost-forms.

32. Which means normalising Elmer Antonsen's readings with <*z*> to <*ᚱ*>. For typographic reasons, bindrunes are underlined. The sequence ... means that runes are adjacent which are irrelevant for the current quote, whereas (...) indicates that runes may have been lost at one edge of the sequence.

33. The group of loans into common Slavic is rejected by Kiparsky 1934:293-96 as an unreliable source of information about the vowels in proto-Germanic and proto-Scandinavian final syllables.

2. THE RECONSTRUCTION OF PROTO-NORSE

2.1. *Terminology and the scope of the corpus*

In the following chapters I attempt to reconstruct proto-Norse, hereafter termed *urnordisch*, as it is reflected in the early Scandinavian runic inscriptions. The terminology employed is merely for convenience, and does not necessarily imply anything about my views on the status of the older runic language, the precise nature of which remains hotly debated. According to a popular current view, the language of the earliest runic inscriptions represents common Northwest Germanic, the antecedent of the Norse and Ingvaemonic dialects.¹ On the other hand some scholars, notably recently Ottar Grønvik, have preferred to adhere to the more traditional view that the texts are specifically Nordic in character.² I would venture to suggest the truth lies somewhere in between, and that it is largely a matter of degree. On the one hand, much of Grønvik's case rests on the faulty assumption that merely because the Weimar inscriptions show apocope of final **-a* by c. 500 this must necessarily apply to all the other West Germanic dialects as well. On the other, there are probably features specific to the Nordic dialects in these inscriptions, but it seems a matter of personal choice as to whether this can be regarded as acceptable dialectal variation.³

1. See, for instance, Antonsen 1975b:26-28 and 1986:323-25.

2. Grønvik 1981 chapter 3, espec. 1981:57-69.

3. For an account of this debate, see H.F. Nielsen 1989:5-12 and chapter IV, espec. on Kuhn's Northwest Germanic hypothesis 1989:85 ff. While Antonsen's argument, on the analogy of Dutch and Afrikaans, that Northwest Germanic is still a legitimate term until late in the older runic period may be justified on the basis of logic, it must be agreed with Grønvik 1981:52 that his terminology 'unektelig er noe forvirrende'. It is quite bizarre to have to swallow Antonsen's assignment of

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In a historical perspective the treatment is therefore of the vowels in urnordisch unaccented syllables from about the 2nd century AD up until the onset of syncope. The starting point is purely arbitrary and chosen because the vernacular record begins here. As noted, the question of whether at this date we should talk of a common Northwest Germanic dialect will be largely passed over, apart from those instances where by force of necessity it impinges on the discussion of certain attested forms. Nevertheless, such considerations do lead on to the important issue of the unity (or otherwise) of the urnordisch inscriptions.

2.1.1. *The urnordisch koine*. It is relatively common to find in the literature references to the uniform nature of the language of the urnordisch inscriptions, and to posit the existence of a pan-Scandinavian *koine*, a supradialectal literary language, to explain it.⁴ However, as pointed out by

his no. 99 from around 200 as distinctively West Germanic, whilst a sixth-century bracteate like no. 85 is still regarded as common Northwest Germanic. Also I fail to see why it is an argument against the terminology *urnordisch*, *urnordisk* that the runic language cannot be internally reconstructed from the evidence of the Scandinavian dialects alone, as argued by Antonsen 1967:17. As pointed out by K.M. Nielsen 1975:11 the form on the Gallehus form KJ 43 *horna* is just as impossible to reach by internal reconstruction even on the evidence of all the Germanic languages combined; this however is plainly no argument against the terminology 'proto-Germanic' or 'Northwest Germanic' for a reconstructed form **horna*.

4. The original impetus for this seems to have come from Makaev 1965, for the details of which see Krause's enthusiastic review. We read 1968:112 that 'die Runen-Koine (S.19-53) scheint mir der anregendste und wertvollste Teil des Buches zu sein, wenngleich auch hier manches problematisch bleibt'. Thus it entered into Krause 1971:§1, and for a time seemed to have taken on the status of accepted wisdom among Germanicists, see Kufner 1972:83, who opposed Kuhn's notion of a remarkably uniform and conservative Northwest Germanic dialect with the observation that 'the long-lasting uniformity of the Ru. inscriptions has been explained more convincingly by the assumption that the Ru. language functioned as a koine.' An even more extreme view is held by Penzl who claims 1989:93 that 'die Sprache der Gallehusinschrift und der anderen Runentexte der Periode ist die natürliche Ursprache aller nordgermanischen und westgermanischen Dialekte [...] Im 4. Jhd. und schon früher ist die Verwendung des Nordisch-Westgermanischen beschränkt, es ist die Sprache der Runenmeister, die sie für die Inschriften

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Antonsen in his review of Makaev,⁵ there is no need to argue for a pan-dialectal *koine* if it is assumed that any dialectal differences that existed were marginal enough not to be indicated by the orthography. The very idea of a *koine* is rightly dismissed by Grønvik as 'helt urealistisk',⁶ and even if such a phenomenon were intrinsically plausible, it seems likely that it would be a redundant assumption on the basis of our current knowledge.

Nevertheless, to my mind the theory has been blown up out of all proportion, and any rigorous approach to the language of the early inscriptions reveals that to posit an urnordisch *koine* is without reasonable justification.⁷ The number of securely interpreted forms is so limited that there simply is not a sufficient body of evidence available. For all that it is partially recorded, urnordisch still has much in common with a typical variation-free reconstructed language. Therefore, whilst it is admittedly sound methodologically to try to match up a uniform reconstruction with the evidence from the inscriptions, to avoid the ad hoc practice of plucking dialectal and other irregularities from nowhere to justify speculative readings, there is no reason to suppose urnordisch runesmiths were forced to share our preconceptions, and no grounds for assuming urnordisch was variation-free.

2.1.2. *Traces of dialectal divisions.* In fact, contrary to the assumption of a *koine*, inconsistencies have been recognised throughout the period of the elder futhark inscriptions. It has long been argued that some early texts show features which according to our current understanding must be classed as specifically East Germanic, and which have as a result been attributed to

verwenden, also auch eine Art Dichtersprache.' I can find no evidence on which to base such an opinion.

5. 1968a:133.

6. 1981:53.

7. Quite apart from the sociological difficulties involved in swallowing the idea of a fully-developed scribal language in Roman Iron age Scandinavia.

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remnants of such dialects still being spoken in Scandinavia after the *Völkerwanderung*, specifically Gothic.⁸ Attempts have been made to identify specifically West Germanic phonological features in the texts as well, although less frequently.⁹ Discussing possible East Germanic features in the early inscriptions, Wolfram Euler decided that other, more widespread, traces of such dialects must have been repressed by the conservative urnordisch *koine*.¹⁰ However, any conception of a diachronic regularisation of the *koine* is difficult to justify, since his two most obvious East Germanic inscriptions on objects found and produced in Scandinavia, KJ 14 Etelhelm and KJ 24 Vimose buckle, are spread from the beginning of the 2nd to the end of the 5th centuries according to the archaeological chronology.¹¹

This raises the question as to what status should be attributed to non-Nordic features like those seen in the apparently East Germanic inscriptions just noted or KJ 23 Vimose sheath-mount *aw<i>ns*.¹² It is of course entirely possible to see them as part of specifically East Germanic relic dialects. However, there seems to be no real reason why these examples should not be exhibiting a purely synchronic dialectal variation parallel to that seen, for instance, in KJ 136 Tjurkö *wurte*, *kurne* as against KJ 43 Gallehus *horna*, KJ 71 By *orte*, Old Norse *orti*, where the reflexes of Germanic vowel harmony testify to a dialectal split within urnordisch.¹³ In

8. Krause 1971:§4.

9. See, for instance, Antonsen 1975b:§8.3 and his nos. 99-106.

10. Euler 1985:14.

11. See KJ:40,61. In addition, even these two cannot be analysed as East Germanic with any real probability.

12. I use these merely as convenient examples to illustrate the point, not because I have any particular faith in their being correctly interpreted.

13. That this is a dialectal split seems plausible given the well-known feature that the East Norse dialects, in particular those of east Sweden and Gotland, show lowering due to vowel harmony far less regularly than the western dialects; see Bandle

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other words, there is no clear justification for divorcing inscriptions showing East Germanic diagnostic features from their Scandinavian context, since they may equally well be seen as Norse dialects sharing isoglosses with what we understand as Gothic.¹⁴

Unfortunately it is difficult to establish any sort of convincing method to control the use of features from other Germanic branches to account for unexpected facets of urnordisch inscriptions. One useful criterion would possibly be that it would be less plausible to posit non-Scandinavian developments on, for instance, stone memorials than on movable artefacts, but as it turns out all the frequently quoted instances are on loose objects anyway. On the other hand, if we take a test case, we can see, for instance, that the criteria proposed by Antonsen for West Germanic features do not seem to mesh with the archaeological picture.¹⁵ Ilkjær and Lønstrup have argued that the chape found in the Thorsberg bog in Schleswig-Holstein was brought by people from between the Elbe and the Rhine, and that the text had been inscribed prior to combat and deposition.¹⁶ It would be most natural then to assume that the inscription, KJ 20 Thorsberg chape **owlpupewar niwajemarir**, is specifically West Germanic, yet it manifestly

1973:24-28. The claim made by Antonsen 1968a:134 that 'the alternation between *u* and *o* defies neogrammarian approaches' is plainly wrong. His proposal that in the position before mid and low vowels late urnordisch [o] was still a conditioned variant of /u/, when he readily admits that /o/ had long since developed into a separate phoneme in other environments, seems an instance of extreme structuralist reasoning. On the other hand, since Old Gutnish shows -o- from Germanic */u/ only in the position before -rC-, but -u- everywhere else, it might be argued that *kurne* exemplifies this purely allophonic relationship.

14. This can be compared to the situation in those later west Norwegian dialects which develop a rounded epenthetic vowel before final -r, as in the texts specified by Pettersen 1989:251-53. In this respect the medieval dialects of Voss and Hardanger seem to share an isogloss with so-called *Inselnordisch*, whereas most other Old Norwegian texts generally exhibit front svarabhakti vowels. It would however be patently ridiculous to dismiss these western epenthetic developments as Icelandic rather than Norwegian.

15. 1975b:§8.3.

16. 1981:57-58 and 1982.

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has preserved stem vowels and final *-z.¹⁷ When one of the few concrete hints supplied by archaeology still manages to disagree with linguistic theory, it seems we must admit that there is no decent way yet established to differentiate consistently between urnordisch inscriptions and those written in other branches of Germanic.

Nevertheless, if anything at all is to be made of, for instance, KJ 23 Vimose sheath-mount *aw<i>ns*, it must be taken to be East Germanic in nature. The assumption of features in the urnordisch inscriptions which seem to our limited understanding to be definitively East Germanic seems historically reasonably well motivated. On the other hand, as befits the growing popularity of the theory of a common Northwest Germanic dialect group, it is rather more difficult to point to diagnostic West Germanic features to justify abnormalities in the early inscriptions. On both counts, individual examples will be taken on their merits as they come up in the following sections.

2.1.3. *The graphemic~phonemic fit.* Naturally, if we deny the presence of a spelling *koine*, then we must either find another explanation for the apparent uniformity of the urnordisch inscriptions, or deny any such uniformity. As I have noted, the conventional identification of non-North Germanic linguistic features seems to indicate that *pace* Euler they were not repressed orthographically. However, since no spelling system has ever been devised which accurately and comprehensively reflects a spoken language, we might also expect to find internal variation. Since urnordisch is to a large degree a reconstructed language, it is notably free of such variation, and although it seems probable that there were dialectal differences throughout Scandinavia in this period, it is also likely that they are effectively irrecoverable given the limitations of the evidence. Strictly speaking, any internal variation in the urnordisch inscriptions is therefore inexplicable in that it cannot be related to any other explanatory features

17. Cf. Barnes 1984:62 note 5.

2.1. Terminology and the scope of the corpus

without circularity; but this does not mean we should force a uniformity onto the language simply because of our methodology, should the evidence demand uncertainty.

One of the main aspects of the belief that the spelling in the early inscriptions is regular and variation-free is the theory that the runic orthographic system was ideally suited to represent the vowel phonemes of urnordisch. In his review of Krause, Barnes expresses some sharp criticisms of the view that the accented and unaccented vowels can be seen as differing in quality, reckoning that 'it is unnecessary, uneconomic and against the evidence of the runic alphabet as an orthographic system to posit more than five qualitative distinctions among the vowels', and he prefers to talk instead of 'a perfect phonemic fit between sound and symbol in Northwest Germanic'.¹⁸ Likewise Antonsen notes that the vowel system posited for urnordisch would need to be accurately represented by 'a total of six graphs. It is not accidental that the futhorc contains precisely this number'.¹⁹ This is fair reasoning, but on the other hand, nor is it accidental that the early futhorc fits so well to the urnordisch phonemic system, since the reconstruction of the language is heavily reliant on the evidence of the early runic inscriptions.

As I attempt to show below, it is my conviction not only that the assumption of any form of urnordisch regular spelling tradition is both anachronistic and, considering our fragmentary understanding of the corpus, indefensible, but also that a rigid methodological insistence that one phoneme is represented consistently by one grapheme (and vice versa) hinders gaining a clear picture of the urnordisch unaccented vowel system. It follows that I believe that some aspects and problems of early runic phonology ~ orthography are better explained by assuming a degree of uncertainty in the phonemic ~ graphemic fit.

18. 1973:360-61.

19. 1975b:4.

2. The reconstruction of proto-Norse

2.2. *The urnordisch unaccented vowel system*

For the history of the Nordic languages, the term ‘unaccented’ deserves a more rigorous definition than I can give here. Given that a proper account of the relevant phonological and metrical sources would be out of place, I will for current purposes equate unaccented with non-root syllables.²⁰ Nor will any account be taken of the possibilities of secondary or late accent. This is obviously not to deny the possibility of such phenomena, but must be the methodology adopted simply because such features are externally unverifiable and so provide no clue with which to explain the segmental development within the unaccented system.²¹

2.2.1. *A morphological analysis of the data.* Although it would be ideal to attempt a purely synchronic analysis, at least as a first step, it is clear that this is impractical in any absolute sense. However, as a point of method the sections below will first attempt to reconstruct the unaccented vowel system working solely from the contemporary vernacular evidence of the runic inscriptions, and only then match this up with evidence from other, specifically comparative, sources. Given the absence of punctuation, the uncertainties surrounding our knowledge of, or illusions about, urnordisch, and above all the problems in interpretation, it is unfortunately usually impossible to gain any hold on most of the early inscriptions without

20. And as such ‘stress’ is defined as word rather than sentence stress. Therefore proclitics, pronouns and other parts of speech which customarily lack prominence in connected utterances will not be dealt with.

21. This applies also to theories such as that proposed recently by d’Alquen 1988, according to which the development of unaccented syllables in Germanic may have been affected by the legacy of the Indo-European mobile accent. This is a perfectly credible notion, but as admitted by d’Alquen §1.12 ‘there is an element of circularity in this reasoning [...] The reader must judge whether the independent evidence is sufficient’, a statement which applies to the work as a whole. Until some more stringent criteria are established with which to control the use of such devices as barytonic vs. oxytonic accentual paradigms etc., the whole framework must remain too ad hoc to credit.

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appeal to later, better evidenced, stages of the language. In essence, then, the prime method of analysis adopted is that of comparing morphological rather than phonological units, that is to identify syllables which share a morphological function, relate this to the equivalent morph in the later stages of the language, and only then attempt to extrapolate phonological information from the data.²² The clear advantage with this method is that morphs have a consistent function and so can be identified by reference to a syntactic context.²³

2.2.2. *The long and short of it.* Although quantity is not marked in the runic orthographic system, it is generally accepted on a comparative basis that the vowel system of urnordisch had a binary length distinction. One particularly important concession to etymology in the analysis presented below is that short and long vowels, the latter including all diphthongs, are treated separately whenever possible. For final syllables at least, I will in general assume that short vowels were present in those syllables which

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22. As a practical example may be noted the interpretation of the Udby fibula inscription proposed by Grønvik 1990a, who argues that the form *talgida* cannot represent a form of the 3rd pers.sg. weak preterite ending since it has a final *-a* for expected *-e*, ie. **-ē*. However, not only does the nominal formation which he suggests as an alternative raise problems as regards Norse word-formation, but also parallel instances in other inscriptions provide a clear indication that this should be analysed as a verbal form, as noted by Stoklund 1991:§6.1. If we are to establish any sort of non-circular model for urnordisch phonology, we must credit morphological features with seniority in cases such as these and then attempt to formulate phonological descriptions to deal with the results, not vice versa.
23. It is of course true that since the urnordisch inscriptions are written in an orthographic system which represents phonemes rather than morphemes, we should give greater credence to the phonological analysis and from there proceed to extrapolate to morphological levels. This point, however, runs adrift when we consider the Saussurean point relating form to content, cf. Lass 1984:2. Since there is no 'real' connection between the two, the arbitrary linguistic sign can fluctuate while the function remains constant. The same is true of course also of the phonetic form of morphemes, but only with morphological features can an analysis be made independently of the mechanics of the graphemic analysis, assuming of course that the basics of the orthography are sufficiently well understood to gain some vague grasp of the sense.

2. The reconstruction of proto-Norse

were not preserved into later Old Norse, generally due to loss at syncope.²⁴ Since, however, this criterion does not consistently apply even there,²⁵ it inevitably introduces some blurred lines, especially in medial syllables where both short and long vowels appear frequently to have been subject to syncope. These anomalies will be discussed when they arise, but in word-formational suffixes, in particular, where long and short vowels can perform the same function, there is often no way to discover the length of the vowel by use of Nordic evidence alone.

2.2.3. The independence of the unstressed vowel system. A further issue of interest lies in determining the extent to which the stressed and unstressed vowel systems had diverged in urnordisch. This leads on to the question of what independence the unaccented vowels had to float between the phonemic values represented by the orthography, which was presumably based on the distinctions found in stressed syllables.²⁶

In Indo-European it appears that accent originally had a primarily morphological role to play, whereas in Germanic it developed a junctural function acting as a boundary signal between one word and the next by virtue of its occurrence on the root syllable.²⁷ In this way it also served to highlight that syllable in the word which was of greatest semantic significance and neglect those of syntactic importance, and as a result in

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24. And so the corresponding ON morphological category was characterised by a zero ending -Ø, albeit often with some umlaut of the root vowel operating as a synchronic marker.
 25. No syncope can, for example, be demonstrated for short vowels in final syllables before urnordisch nasals, see below §9.5, whilst there seem to be contradictions between forwards and backwards reconstruction in those endings discussed in chapter 6.
 26. If we assume that a rune's value was determined by the initial sound of its name; see above §1.2.1.1.
 27. See Kuryłowicz 1968 chapter 2 (§§19-76) and more recently Lubotsky 1988:2. Kuryłowicz notes §248 that within Germanic 'wurde der Akzent aus einem morphologisch zu einem delimitativen'.

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the recorded languages it is clear that the root and therefore accented syllable can often contain more distinctions, both quantitative and qualitative, than elsewhere. So is it possible to identify signs that urnordisch had already reached the stage where the unaccented vowel system was coming to function as a mere subset of those vowels available to the stressed syllable? Can we see any signs of the stressed syllable gaining some of the privileges demanded, for instance, by Liberman for discovering phonological stress,²⁸ or was the accent purely a surface phonetic increase in articulatory intensity?

In terms of the traditional reconstruction, a comparison of the two subsets reveals that for late proto-Germanic no short mid vowels are reckoned to exist in unaccented syllables.²⁹ This might be taken as a sign that the move to bring high and mid short vowels to allophonic status, which appears to have started with vowel harmony and culminated successfully in Gothic, actually worked in unstressed syllables. As regards the early orthography, it seems distinctly possible that, if the unaccented and accented vowel systems were divergent, spelling inconsistencies would be expected, either because the orthographic distinctions available were unable to meet demand, or, as seems more likely, because they offered an embarrassment of riches.

As I have noted, it is in fact a common view that in urnordisch the unaccented and accented vowel systems were still fairly close to one another. However, only a close examination of the written evidence can demonstrate the validity or otherwise of this attitude, and my own belief is

28. 1982:24-26.

29. Following Stiles's view that proto-Germanic **-er-* had developed to late Germanic **-ar(-)*, see below §7.12.1 on KJ 72 Tune after.

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that the inscriptions reveal discrepancies between the two sets already in the urnordisch period.³⁰ The sections following will attempt to prove, and then build upon, this notion.

30. Stiles 1988a:137 (note 4) observes that 'an important, and fruitful, methodological principle is to interpret the inventory of vowel phonemes for unaccented syllables in each Germanic dialect as being as far as possible a subset of the vowel phonemes found in accented syllables'. Of course, logically a subset can also mean an identical set.

3. NOMINAL SHORT STEM VOWELS IN FINAL SYLLABLES

3.0. *The background*

From an Indo-European viewpoint, short stem vowels are most clearly to be found in the nom.sg., acc.sg. and acc.pl. endings, that is those instances where no vocalic morpheme was added to the stem and for the *i*- and *u*-stems the zero grade of the stem prevailed. As such they can sometimes be easily identified on formal grounds. However, for many of the instances in the corpus of urnordisch inscriptions where we seem to be dealing specifically with nom.sg. endings, there is no clear morphological context into which to fit the form, since, for example, the inscription often consists simply of a personal name and nothing else. It is customary to assume that the nom.sg. is the unmarked case which is to be expected on such occasions, and this will be the assumption here as well.¹ However, since such forms without contexts unfortunately comprise the single largest group in the body of nom.sg. endings, this attitude leaves itself open to the charge that, in the absence of any external criteria to determine the presence of a nom.sg. ending, we engineer for ourselves a neat circle.

3.1. *The nominative sg. of masculine a-stems*

With a clear morphological and semantic context we can identify as nom.sg. forms KJ 13a Nøvling **bidawarijar**, KJ 27 Kragehul spear-shaft **erilar**, KJ 29 Lindholm **erilar**, (sa)wilagar, KJ 30 Garbølle **hagiradar**,

1. Although certain instances which deviate from the expected path stir up some cause for thought, see below §3.1.1.

3. Nominal short stem vowels in final syllables

KJ 43 Gallehus **holtijar**, KJ 59 Ellestad **sigimarar**,² KJ 70 Järsberg (...)ubar, **harabanar**, **erilar**, KJ 72 Tune **wiwar**, KJ 73 Rö **hrarar**, **stainawarijar**, KJ 74 Reistad **wakrar**, KJ 75 Kjøllevik **hagustadar**, KJ 128 Väsby and Äskatorp (u)uigar, **erilar**,³ and KJ 136 Tjurkö **heldar**. To these we can probably add, simply due to grammatical agreement with the pronoun **ek**, KJ 16 Bratsberg clasp **...erilar**, KJ 55 Valsfjord **hagustaldar**,⁴ **þewar**, KJ 56 Veblungsnes **i-/erilar**, KJ 58 Årstad **winar**,⁵ KJ 64 Barmen **þirbijar**, KJ 69 Rosseland **wagigar**, **i-/erilar**, KJ 71 By **i-/erilar**, **hrorar**,⁶ KJ 132 Femø **fakar**,⁷ and also perhaps simply due to their presence adjacent to a copula KJ 60 Vetteland **faikinar** and KJ 61 Kalleby **haitinar**. As is clear, no distinction needs to be drawn between the substantive and adjectival inflexion here.

For the rest we are in essence reliant on the assumption that forms in grammatical isolation are likely to be in the nominative case, rather than,

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2. We would have expected an *i*-stem, see below §3.1.2.
 3. Both of these rely on a reading of a very dubiously transmitted bracteate inscription.
 4. An alternative reading is **hagustaldir**. Olaf Rygh in *NIÆR* I:345 was hesitant as to whether the tenth rune was *-a-* or *-i-*, but in fact he only seemed to consider the former as a possibility under pressure from Sophus Bugge who wanted to read an *a*-stem. In the *Rettelser* II:563 the reading in *-a-* was retracted, but later commentators have tended to quote Rygh as an authority for the reading **hagustaldar**. The suspicion remains that this form is more down to wishful thinking than the marks on the stone.
 5. According to the interpretation offered by Høst 1987:158. The exact reading of the stone at this point has been endlessly debated and this form is therefore very uncertain.
 6. The formula **ek erilar** + name is followed here by a verb which appears to be in the 3rd pers.sg. preterite, which renders the text somewhat suspect, see below §8.5.
 7. Although this form is included here, there is some doubt as to whether it can be trusted as reliable given the frequent corruption of such bracteate texts. It seems, for example, fairly plausible that the instance in KJ 131 Åsum **akar** is to be understood as a corrupt variant.

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say, the vocative⁸ or even the accusative.⁹ Instances are KJ 10 Himlingøje 2 **widuhudar**, KJ 20 Thorsberg chape owl **pupewar**, KJ 31 Øvre Stabu **raunijar**, KJ 37 Fløksand **laukar**,¹⁰ KJ 40 Setre **halmar**,¹¹ KJ 58 Årstad **hiwigar**, KJ 73 Rö swabaharjar, **s(a)irawidar**, KJ 74 Reistad **iupingar**,¹² KJ 75 Kjøllevik **hadulaikar**, KJ 81 Stenstad **halar**, KJ 84 Amla **h<l>aiwidar**, KJ 85 Skåäng **leugar**, KJ 87 Skärkind **skipaleubar**, KJ 88 Møgedal **laipigar**, KJ 91 Tørvika A **ladawarijar**, KJ 92 Eidsvåg **hararar**, KJ 99 Möjbro **frawaradar** and **slaginar**,¹³ perhaps KJ 100 Krogsta **siainar** if this is to be emended to **stainar**, KJ 119 Fünen 1 **houar**,¹⁴ and KJ 120 Schonen 1 **gakar**. Naturally, many of these, especially the forms found on the bracteates, remain mysterious as to both function and meaning, whilst other instances which have sometimes been quoted I have regarded as too uncertain to use as evidence here.¹⁵

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8. If such a distinct case existed in urnordisch; for the arguments, see Stiles 1984:23-34.
 9. Not to mention those instances where we seem to have a form in the dative or genitive, perhaps for dedicational purposes; these are of course only recoverable if we have already identified the expected shape for such endings on other grounds.
 10. And the other instances of this form on the bracteates KJ 108 Års 2 **laukar**, KJ 109 Skrydstrup **laukar**, KJ 110 Børringe **laukar**, KJ 120 Schonen 1 **laukar** along with apparently corrupted attempts like KJ 111 Dänemark 1 **lkar**.
 11. Although this is probably better resegmented as two words to represent a post-syncope stage of the language; see Grønvik 1987:§§1-4 as opposed to Antonsen 115, the latter adhering to the view that the text is in pure urnordisch.
 12. Or **idringar** according to Antonsen 41.
 13. Unless the word division is adopted whereby these two are linked by a copula, when we might prefer to class them with those examples like KJ 60 Vetteland **faikinar** above; see below §5.1.1.
 14. Or perhaps better **horar** as read by Antonsen 62.
 15. Of particular relevance is the form KJ 95 Gummarp **hapuwolafa(...)** which may represent either a nominative or accusative form, and may in turn represent the original stem vowel. The older drawings of this stone do not allow us to determine which of these two options is correct, least of all do they justify emendation to

3. Nominal short stem vowels in final syllables

3.1.1. *Some more awkward forms.* The forms just listed give a coherent picture of the *a*-stem nom.sg. ending which appears to justify the assumptions noted above in §3; however, problems crop up elsewhere. Of particular interest is the form on the Illerup shield-mount 3 **lagupewa**, since to judge from the cognate elements in KJ 20 Thorsberg chape **owlþuþewar** and later ON *-þér* this should be a strong *a*-stem formation as is the simplex, cf. KJ 55 Valsfjord **þewar**, Gothic *þius*. To explain the absence of the expected nom.sg. **-r*, Antonsen suggested this form represented a West Germanic dialect with loss of final **-z*,¹⁶ and certainly this is a viable route to take, since forms like *Chariovalda* recorded in classical texts may indicate that this loss was so early in some West Germanic dialects at least.¹⁷ However, it is at best a stop-gap and ad hoc measure, and becomes even more so when the archaeological picture suggests that the weapons deposited in the Illerup bog are likely to have been brought from the region of what is now western Sweden up into the Oslo fjord.¹⁸ No satisfactory solution immediately presents itself, but the test case of the Illerup bog finds merely serves to illustrate how little we know or are willing to accept of what may be purely local practices. The small batch of

****hāþuwolafr** as assumed by Antonsen 116, see below §5.9.3. Likewise the final syllable in KJ 96 Stentofen **heramalasar** cannot be considered a reliable witness to the urnordisch form of this ending, but is more likely either to represent a parasite vowel, or to be re-divided as a separate word **AR** 'is' as in Antonsen 119. Unless we are to regard the spelling **AR** for expected **ir* or **er* as simply part of the general orthographic idiosyncrasies in the Stentofen and Björketorp inscriptions, there seems something at least to be said for the position in Antonsen 1978:287 that East Norse confusion of accented **e* and **æ* has already begun to show itself in this form, although it must presumably be understood as a purely local innovation ahead of its time given that later runic evidence appears to continue to distinguish these two phonemes into the Viking age, see Noreen 1904:§113.

16. 1987:24.

17. As quoted in Krause 1971:§6, although Förstemann 1900:1496, Schönfeld 1911:128 and Schramm 1957:42-43 all believe instead it is a weak ending, cf. ON *-valdr* alongside *-valdi*.

18. See Ilkjær and Lønstrup 1983:116, also Stoklund 1987:283.

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inscriptions are notable for two striking peculiarities; firstly, they contain the only known instances of *Spiegelrunen* outside the English Spong Hill inscription *alu*,¹⁹ and secondly they contain no *ʀ*-runes whatsoever. Alongside *lagupewa* we find on one of the other shield-mounts the form *swarta*. Although this is usually interpreted as a weak *n*-stem nom.sg., if the escape routes proposed for *lagupewa* were adopted, then we would be perfectly entitled to assume that *swarta* also was a strong noun, the precursor of ON *Svartr*. Equally striking is the form *afilaiki* on the Illerup plane, where a final **-ʀ* has generally been supplied to give a more usual ending. Unfortunately, the exact interpretation of the form remains obscure, but a final element as in ON *-leikr* would appear to be one possibility. However, although the surface of the plane breaks away at the end of this sequence, there is still clearly enough visible to see that no final stave ever followed, and therefore the suppletion of **-ʀ* is done purely on a linguistic basis and cannot be justified runologically.²⁰ Is it likely that we are dealing here with texts from a locale where, for instance, inscriptions of this sort were composed with names in the vocative or accusative? Or where a centre of innovation briefly inspired a move to drop final **-z* as in the West Germanic dialects, but proved unfruitful, and the process was reversed? It seems unlikely we will be able to answer these questions, nor determine specifically the form of *lagupewa*, without more evidence coming to light. But it is a useful reminder that forms without contexts cannot be taken for granted.

3.1.2. *Clashes with comparative evidence.* Apart from these exceptions, the overall picture gained so far presents a fairly uniform ending in *-aʀ*, but this would not be too surprising were the methodology simply to locate such spellings and place them in this category. Encouragingly, however,

19. See Pieper 1987.

20. See Moltke 1985:88-90, Stoklund 1987:286; Barnes 1984:62 confirms my suspicions on this point.

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when we attempt to match up our attested evidence with the stem classes of corresponding forms either in other Germanic dialects or the later stages of the Nordic languages, the correspondences do mostly lead us to expect *a*-stem formations. Without attempting to give an etymological account of them all, we can observe the productive suffixes **-ga-*, **-la-*, **-ja-* listed above fit well into this category, likewise common Germanic words such as **hundaz* 'dog', **stainaz* 'stone' and others.

Only in a few cases is there a conflict of interests as regards the stem vowel recorded, but these are usually explicable on other grounds. For instance, although there is a direct disparity between the *a*-stem nom.sg. form KJ 81 Stenstad halax on the one hand and KJ 50 Strøm hali, which appears to be an *i*-stem acc.sg. (cf. §3.8), on the other, this has a parallel in the later Scandinavian dialects where the equivalent of the OI masculine noun *hallr* appears both as a feminine *ō*- and *i*-stem in Old Swedish *hal*, *hæl*.²¹ In addition it is often rather difficult to pin down the exact quality of the stem vowel in compounds forming proper names. An example, if reliable urnordisch, is the stem vowel <A> in KJ 59 Ellestad sigimarar which appears as <i> in KJ 20 Thorsberg chape wajemarir.²² It was this clash amongst other things which led Krause to argue that the form sigimarar was incorrect, whether by mistake or due to deliberate archaicising, but there is no reason to reject it out of hand.²³ The

21. See Noreen 1904:§399 Anm. 1, §404,2 and §409,3b. It would of course have been particularly pleasing if this isogloss between West and East Norse had been visible in the distribution of the runic forms.

22. Assuming this latter is a compound with Krause et al. against Marstrander 1952:10-17, see below §4.9. Even if marir is taken as a simplex, it still clearly indicates it was no *a*-stem.

23. In KJ:135-36 it is argued that the text was written by a runesmith who knew the younger rather than elder futhark, in which case it could scarcely be seen as reliably reflecting genuine urnordisch. It must be admitted that no other inscription with the A-rune can to my knowledge be seen as prior to the syncope period, the most likely instance probably being the text on the Skåång stone, see below §5.11.2. Likewise, if Krause's interpretation of the mysterious line Ilc has any merit then this would further indicate the late date of the text. However, if the

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comparative evidence points to a *ja*-, not *i*-stem formation in the simplex adjective, whilst both later name forms, such as Old Icelandic *Sigmarr*, Old Swedish *Ingemar*, and comparative evidence give no signs of *i*-stem declension here.²⁴ It seems clear that compounded forms, especially names, could split off from their component parts and take up independent declensional patterns. This is possibly part of the process, which can be seen in all the Germanic languages, of taking what appear to be deliberate steps to divorce proper nominal compounds from their origins. According to traditional wisdom, in some Germanic languages compound names tend to behave metrically as if they were obscured compounds, even if they are perfectly transparent, and so do not take a significant secondary accent on their second element unless a further syllable follows, thus OE *gúðrinc* alongside *Béowulf*, *Béowulfes*.²⁵ If correct, this may be an indication of how the loss of accent came about which led to such wholesale restructuring of the second elements of names in Old Norse. At any rate, if we can assume that name forms took on their own declensional pattern as a unit rather than necessarily following that of their second elements,²⁶ then KJ 59 Ellestad *sigimarar* is not too problematic.

3.1.3. *Word-formational types*. Two more of the examples noted above, KJ 30 Garbølle *hagiradar* and KJ 99 Möjbro *frawaradar*, are interesting in that they may well exemplify the type of compound where we find

inscription is a late anachronistic forgery, it is a remarkably competent one, and we might have expected that a runesmith capable of such work would have known to use the *a*- rather than *ʌ*-rune if he was intending deliberate archaisms.

24. This element may be an old *u*-stem, and Kaufmann 1968:250 notes that we would in fact expect to find **-mēra-* alongside the *ja*-stem formation **-mērt-* in Germanic, similarly Schramm 1957:32. The same points are put forward by Antonsen 1978:284 to defend the authenticity of this form.
25. See Streitberg 1896:§143 B,1-3, Campbell 1959:§88, although admittedly this seems to be one of the less reliable views passed down in the handbooks.
26. Cf. ON *Gunnarr*, dative *Gunnari* alongside *herr*, dative *her* and others.

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deverbative *a*-stem agent nouns as the second element.²⁷ For these particular forms, a denominative origin from **rāða-*, ON *ráð*, might be considered a viable alternative,²⁸ but the deverbative practice is also apparently to be identified in KJ 82 Saude *wajaradas* and even more obviously in KJ 72 Tune *woduride*.²⁹ This method of word formation is also attested in later *a*-stem *nomina agentis* formed straight from a verbal root such as ON *hringbrjótr*, and appears to be especially prevalent in Norse.³⁰

If we accept these as deverbative formations, then another, admittedly fairly tangential, point can be made stressing how far urnordisch methods of compounding have already innovated away from proto-Germanic. There are no clear instances of *a*-stem *bahuvrīhi* formations in the early inscriptions,³¹ whereas *i*-stem formations are attested (see §3.7). This tentatively indicates that urnordisch already shows the tendency to ‘extend’ or ‘mutate’ *bahuvrīhi*’s to distinguish them from the simplex.³² Although admittedly Old Norse forms in *-faldr*, Gothic *-falþs*, and more notably *-orðr* alongside Gothic *-waurds* but OE *-wyrde* show that *a*-stem *bahuvrīhi*’s developed in the Nordic branch, the parallel mutation seen, for example, in KJ 133 Nebenstedt 1 *-augir* alongside ON *-eygr* shows a more advanced stage than Gothic, where mostly only pure *bahuvrīhi*’s are

27. Referred to in Krause 1971:§25,1.

28. In which case they would probably be rare examples of urnordisch *bahuvrīhi* compounds used as names, cf. the later ON *bahuvrīhi* adjectives such as *einráðr*, *harðráðr*.

29. See below §3.3 and §5.1 respectively.

30. Meid 1967:§68,1.

31. As for instance Gothic *hauhhairts* ‘proud’, cf. Sanskrit *rāja-putra-* ‘having kings as sons’ with *rāja-putrá-* ‘king’s son, i.e. prince’; see Burrow 1973:215.

32. See Carr 1939:63-67,252-54. This rather unfortunate terminology refers to morphological mutation, and has nothing to do with the accident of history which meant the ‘mutation’ was later often marked by *i*-umlaut.

3.1. The nominative sg. of masculine *a*-stems

known.³³ Although this can naturally only be a tentative point at best, since it is clear that Germanic inherited the method of forming *bahuvr̥hi*'s by addition of the *i*- or *ja*-stem suffix, the limited evidence we have from the urnordisch inscriptions suggests a more advanced progression towards getting rid of the pure type than, say, Gothic, or in some ways even OE.³⁴

3.1.4. *Conclusion.* The *a*-stem nom.sg. ending is therefore to be identified as *-ar*, which on the basis of all comparative evidence appears to contain a short vowel. Since no other Germanic language preserves the final stem vowel in this ending, this testimony is of great importance, and appears to be backed up by some of the more unambiguous evidence which can be gleaned from the loans into Finnish. So the correspondence between, say, ON *konungr* and Finnish *kuningas* can be used as confirmation of the reconstructed ending in Germanic **-az*. Rather more awkward is the fact that alongside neat parallels like Finnish *rengas* for ON *hringr*, there are numerous cases where the Germanic and Finnish forms do not match up. In instances like Finnish *kauris* 'male goat' for ON *hafr* we can identify an apparent shift of stem class, whilst a final *-s* has been added to neuters such as *mallas* for ON *malt* and been removed from masculine nouns like *miekka* for ON *mækir*.³⁵ In his survey of the use of Finnish evidence for

33. See Carr 1939:93-94,254-55. Gothic *unkarja* from *kara* would appear to be the best instance of morphological mutation and is perhaps parallel to KJ 65 Nordhuglo *ungandir*, see below §3.7.

34. Further, we have at least one clear example of what Carr 1939:266 terms 'reversed bahuvr̥his' in KJ 73 Rō s(a)irawidar 'with gaping wound' (as translated by Antonsen 26), ON ***sárviðr*. According to Carr, this type of compound, particularly common in ON, arose alongside earlier types like ***viðsárr* as 'another method which was adopted to remove the discrepancy between the declension of the simplex and that of the Bahuvr̥hi compound'. If this is correct, then another facet to the drive to abolish pure *bahuvr̥hi*'s can already be identified in urnordisch, but the existence of this type already in Gothic seems clear enough from examples like *akranalauss* alongside *lausawaurds*. It may well then have been present already in proto-Germanic as well; see Meid 1967:§41.

35. Although Old Icelandic does show a neuter form *-mæki* as the second element of the compound *hræmæki* 'spear', the relevance of this form is suspect since it

3. Nominal short stem vowels in final syllables

the reconstruction of Germanic, Juntune concludes 'thus if a Germanic word had an *-as* (or *-is*), it is probable, though not imperative, that this same ending would appear in a Finnish borrowing, but the converse is not true: that a Finnish word has an *-as* or *-is* ending does not prove that this ending must have been present in the original form.'³⁶ There is therefore no way of arguing from the Finnish evidence as regards individual forms; we must simply rely on the balance of probability that the *-as* ending at least sometimes represents Germanic **-az*.

3.2. *The accusative sg. of masculine a-stem substantives*

Three instances of this ending can be made out with a clear syntactic context, namely KJ 59 Ellestad **staina**,³⁷ KJ 60 Vetteland **staina** and KJ 72 Tune **staina**. Aside from these KJ 22 Vimose chape **makija** is also often identified as a masculine acc.sg. ending, but although various interpretations of this inscription have been offered, on the whole they are too strained to be convincing.³⁸ Nevertheless, there is equally nothing to suggest that it should not be an acc.sg. form, so there is no positive counter-evidence. Again, all of these are clear as regards their stem formation, and so we can recognise a uniform ending *-a*.³⁹

appears in the *Pulur* as a proper-name and so may be counted amongst those instances where compounded names adopt a distinct declensional pattern. Also, from Skj. I:665-66 it can be seen that one MS has the form *-mækir*, though according to the principle of *difficilior lectio* this is presumably less important.

36. 1973:34. The data above is culled from 1973:33.

37. Assuming the word division in the sequence **stainar**. (with the final **r**-rune inverted) is correct, see KJ:133-34. There is some doubt that this inscription can be assumed to represent any stage of urnordisch accurately, cf. §3.1.2.

38. See KJ:58.

39. Other possible examples have been considered too unreliable to be included. Since

3.3. The genitive sg. of masculine *a*-stems

3.3. *The genitive sg. of masculine a-stems*

Two examples of this ending are found in *ek erilar/pewar* formulas, i.e. KJ 27 Kragehul spear-shaft **asugisalas** and KJ 55 Valsfjord **godagas**, although their identification is partly circular in that the formula is only identified on formal grounds, otherwise we might have expected them to be epithets or titles in the nominative.⁴⁰ In addition KJ 78 Bø **hnabdas** seems an intuitively satisfying genitive form governing the noun **hlaiwa**,⁴¹ even though the morphology of the formation is unclear, and on this analogy it seems possible to explain KJ 82 Saude **wajaradas** as another gen.sg. in a similar memorial phrase, despite the fact that it is even more isolated syntactically.⁴² Finally, there is also the adjectival ending attested in KJ 60 Vetteland **minas**. Comparative evidence suggests that on this point there was no distinction between the substantive and adjectival declension; the runic evidence confirms this, and leads to a single coherent picture of *-as* representing this ending.

syncope has taken place in the Istaby inscription and the *a*-rune is used basically to denote parasite vowels, as opposed to the *ʌ*-rune which is used for etymological **a*, the form KJ 98 **hariwulafa** cannot be used as an indication of the quality of the final vowel as apparently assumed by Antonsen 117. Instead the spelling is most likely intended to represent a final reduced syllable about to be apocopated, though it is difficult to account for the origin of such a spelling tradition. As for Krause's interpretation of KJ 50 Strøm **haha** as an acc.sg. of OI *há* 'aftermath', although this is pleasing semantically, later evidence indicates this form was in fact feminine, whilst the proposed etymology in **hēh(w)a-* is uncertain in that *há* might simply be a by-form of *hey*; an equally attractive alternative is also offered by Antonsen 45.

40. On this formula, see below §3.7. The constituent parts of KJ 55 **godagas** are disputed, but the ending seems clear enough whichever option is taken, cf. below §7.2.
41. Rather than reading a bind-rune along with KJ **hnabudas**, which has little in its favour.
42. For the transliteration see below §4.9. A further parallel can be seen in KJ 80 Rävsaal and probably also KJ 83 Belland, see below §7.11.

3. Nominal short stem vowels in final syllables

3.4. *The accusative pl. of masculine a-stems*

The only identifiable reflex of this ending is KJ 95 Gummarp **staba**, which occurs in an inscription which is possibly post-urnordisch in that syncope may already have taken place (see §5.9.3). This is therefore likely to directly reflect the stage reached in OI *stafa* and gives no clear indication of the urnordisch form of the ending. Despite the fact that a final syllable has been retained into Old Norse, comparative evidence strongly suggests the ending contained a short vowel in Germanic **-anz* which developed to **-an(n)* and so to transitional *-a* with loss of the final nasal.⁴³

3.5. *The dative pl. of masculine a-stems*

Again, our only evidence comes from a text which shows a number of signs of syncope, the two forms being KJ 96 Stentoft **haborumr** and **hagestumr**.⁴⁴ Since a short vowel is posited here on the grounds of comparative evidence, cf. Gothic *dagam*, the survival of the syllable through the syncope period is usually attributed to the protection of the following nasal. However, of all the endings attested from the *a*-stem declension, this is the only short vowel which fails to appear as <a>. Although two forms in one solitary inscription are scarcely any basis on which to forge a theory of stem vowel confusion, they are supported by the later ON dat.pl. ending seen in OI *dqum*. As is well established, the whole of the Northwest Germanic language group exhibits this tendency to develop a high back vowel in place of expected Germanic **-a-* from IE

43. For the reconstruction, cf. Gothic *dagans*. Nasalisation or lengthening may be responsible for the lack of syncope, see below §9.5.1.

44. I find Santesson's 1989 interpretation of these forms as **habrumr* 'goats' and **hangistumr* 'horses' persuasive, see below §7.9 on the *st*-suffix, and therefore class them as *a*-stems. If the traditional interpretation of **gestumr** for OI *gestum* is preferred, then we are dealing with an *i*-stem dat.pl. ending, but to judge by Gothic *gastim* not the original one.

3.5. The dative pl. of masculine *a*-stems

*-o- in the position before the nasal *-m-, cf. OE *dagum*, OHG *tagum* vs. Gothic *dagam*. Unfortunately, since these forms in -umr are so relatively late in the urnordisch corpus, they may simply represent the ON stage -um. There is therefore no way to determine on this evidence alone whether the urnordisch dat.pl. ending might have had the form *-am-, *-om- or *-um-.⁴⁵ However, since the results of what appears to be a parallel raising are already attested as <u> in the *ð*-stem declension (cf. §3.12), *-um(r) for *-um(r) is the most probable reconstruction for urnordisch.

3.6. The nominative and accusative sg. of neuter *a*-stems

Since all evidence from every source indicates that these two endings were equivalent, they will be treated together. The best evidence for a nominative is KJ 50 Strøm **horna**, whilst the formally identical KJ 43 Gallehus **horna** is the clearest case of an accusative ending. A few other forms are also conventionally grouped here even though they are not attested in a syntactic context. Reasonably plausible nom.sg. instances are KJ 37 Fløksand **lina**, if this is correctly interpreted as the forerunner of ON *lín* 'linen',⁴⁶ and KJ 78 Bø **hlaiwa**.⁴⁷ Analysis as a nom.sg. is also the most likely interpretation for KJ 105 Skodborg **auja**,⁴⁸ whilst KJ 127 Seeland 2 **auja** is even more clearly playing the role of a direct accusative object. Unfortunately, since there is rather little evidence on which to

45. Or anything else, in fact, though these would appear to be the likeliest three alternatives.

46. The full text reads KJ 37 **lina laukar** f, and it is noted in Krause 1971 no. 26 that the phrase 'linen and leek' is 'eine auch literarisch bezeugte Fruchtbarkeitsformel'; it occurs in a strophe in *Völsa þáttr*, see KJ:85.

47. On the other hand KJ 77 Myklebostad **hlaiwa** is by no means a secure enough reading to use as evidence given that the stone is severely worn away at this point.

48. See below §3.14.4 for approaches to the inscription on the Skodborg bracteate, also Salberger 1961.

3. Nominal short stem vowels in final syllables

decide this last noun's stem formation, these attestations provide only circumstantial evidence.⁴⁹ KJ 27 Kragehul spear-shaft **hagala** has also often been interpreted as the equivalent to ON *hagl* and so as containing a neuter sg. ending, but due to the absence of a context it cannot be determined whether it should be a nominative or accusative.⁵⁰ Finally KJ 71 By **arina** appears to provide the only case of gender clash in our evidence. Although the text following is difficult to read, the form seems plainly to be the direct object of the verb **orte**, agreeing with the neuter demonstrative **þat**, whereas on the basis of OI *arinn*, Old Swedish *ærin* and cognates like OHG *erin* we would expect this to be a masculine noun.⁵¹ However, given that the interpretation of the runes following **arina** as offered in KJ is not really justified due to the worn condition of the stone, the option is open to us to resegment the sequence, perhaps seeing **arina** as the first element of a compound with a neuter second element, although the traces left do not suggest any obvious options, and the reliability of this attestation must remain open to question.⁵² As a last resort we may note that **arina** shows the ending in **-a** which would be the expected form both for a masculine and neuter acc.sg. form anyway.

To sum up, despite the disparate nature and reliability of the evidence, a nom. and acc.sg. ending in **-a** looks reliable enough.

49. On the semantics and etymology of this mysterious word **auja*, see Andersen 1970:188-201.

50. In fact, due to the break in the shaft it is not even certain whether **hagala** has been divided from the text correctly, nor if the equation should instead be with the Old Icelandic masculine noun *hagall* representing the name of the **h**-rune.

51. For the absence of West Norse *κ*-umlaut, see de Vries 1977:13 who ably sums up the difficulties inherent in deriving OI *arinn* from **azina-*, even though on the basis of other cognates in Latin he seems to approve of a derivation from a root **az-*.

52. On KJ 71 By as a whole, see Grønvik 1981:218, who warns that the text is not as convincingly solved and interpreted as is usually assumed.

3.7. The nominative sg. of masculine and feminine *i*-stems

3.7. *The nominative sg. of masculine and feminine i-stems*

The historical reconstruction suggests that no gender distinction existed in this ending, and nothing in the urnordisch evidence contradicts this. Both KJ 43 Gallehus **hlewagastir** and KJ 63 Einang (...) **dagastir** can plausibly be viewed as nom.sg. forms in that they govern a following finite verb, and with them we can include KJ 53 Kårstad **aljamarkir** as it appears to be in grammatical agreement with the pronoun **ek**. If, as is generally accepted, this last form is a *bahuvr̥thi* formation with the sense 'foreigner',⁵³ then this supports the identification of another couple of *i*-stem *bahuvr̥thi* formations which have no syntactic context to be placed by, namely KJ 65 Nordhuglo **ungandir**⁵⁴ and KJ 133 Nebenstedt 1 **gli-augir**.⁵⁵

53. Although substantive, as opposed to the usual adjectival, *bahuvr̥thi* formations cannot be demonstrated for the early stages of the Germanic languages, the two main exceptions appear to be a) in proper nouns and b) in prefix compounds, see Carr 1939:165-66. Both of these types seem to be directly attested in the urnordisch inscriptions, and as noted by KJ:119 **aljamarkir** is formally equivalent to Welsh *allfro* 'foreigner', Gallic pl. *Allobroges*.

54. Antonsen 1975a:239-40 argues on grounds of certain syntactic parallels within the urnordisch inscriptions that this form should be interpreted as an *i*-stem gen.sg. in **-t̥z* from IE **-ejes*. His parallels all point to the fact that the *ek erilar/pewar* formulae are governed by nouns in the genitive, whether their employer, patron, owner or whatever; so KJ 27 Kragehul spear-shaft **ek erilar asugisalas muha** ..., KJ 56 Veblungsnæs **ek irilar wiwilan**, KJ 69 Rosseland **ek wagigar irilar agilamudon** and KJ 55 Valsfjord **ek hagustaldar pewar godagas** are all normally interpreted this way. Although I find Antonsen's points quite plausible, it cannot be denied that on the phonological and morphological front he is on a sticky wicket, as pointed out by Grønvik 1981:63-65. The West Germanic forms seen in OHG *ensti*, OE *ēste* cannot be used in support of a proto-Germanic variant ending **-eiz* alongside the expected **-aiz*, but are more likely to be due to extension of the stem vowel proper to the dat.sg. in **-ei*, nom.pl. in **-ejez* etc, specifically within the West Germanic dialects; see also Walde 1900:57. In addition, of course, despite the fact that his formulaic parallels are very interesting, there are still only four of them, and apparent exceptions like KJ 29 Lindholm **ek erilar sawilagar hateka** are all the more damaging given that the ending of the Nordhuglo stone inscription (KJ 65) is not actually preserved.

55. Stamped on a bracteate found in lower Saxony but usually reckoned to be of

3. Nominal short stem vowels in final syllables

There are several other forms which are also usually placed in this category but only on formal grounds. The presumed names KJ 86 Berga **saligastir** and KJ 90 Sunde **widugastir** both occur in syntactic isolation, whilst the analysis of KJ 77 Myklebostad **asugasdir** is uncertain due to the fact that the rest of the inscription cannot really be read; however, all three may be compared with the nom.sg. forms in **-gastir** noted above.⁵⁶ Other instances often quoted are on the whole less useful, such as the name sometimes read on the Darum 3 bracteate KJ 36 **lilir**⁵⁷ and KJ 93 Bratsberg stone **palir**, which has no recognisable direct cognates anywhere. If the reading of the Sønder Rind bracteate KJ 135 as **uinir** for ON *vinr* 'friend' is correct, then we may have another form attested within a syntactic context in that it appears to be in apposition to the pronoun **ik**, but as with most bracteate texts this interpretation is not one to inspire confidence.⁵⁸ As noted above, Illerup plane **afilaiki** shows no trace of a final ***-r**, and though a case could be made out for seeing this form as an *i*-stem formation in ***-leikir**, ON *-leikr*, this is rather unlikely speculation. Finally, KJ 20 Thorsberg chape **wajemarir** appears to contain the cognate

Jutlandic type, see KJ:251 and Mackeprang 1952:35,82 who states the *Nebenstedt* finds 'maa antages at være Import fra Danmark'.

56. Comparative evidence also suggests this noun is an *i*-stem, cf. ON *gestr*, *gestir*, OE *giest*, Latin *hostis*.
57. By Noreen 1923 Anh. 13 and Antonsen 60; although undoubtedly imaginative, this is an unconvincing interpretation as a whole, see below on *aiwuida(i)*- §8.6.
58. Krause 1971 no. 97 admits 'die Lesung ist in verschiedener Hinsicht unsicher, erscheint aber zumindest möglich'. Antonsen 87 gives an alternative reading **uigir** for ***wīgiz** 'warrior' which is morphologically less pleasing than **uinir**, although to decide between a *g*-rune **×** and an *n*-rune **†** on a bracteate where the relative angle of the vertical staves to one another is skewed by the curved direction of the duct is difficult even at the best of times, cf. the similar problems in deciding between a *g*-, *n*- or *u*-rune in the form *kuni*? on the Ribe fragment; see C.J. Nielsen 1990:147 and the picture in Moltke 1985:346. Evidence for an *i*-stem formation from the root ***wīg-** in Germanic is difficult to find. Although Antonsen quotes OHG compounds with first elements in *Wigi-*, there are also forms attested in *Wiga-* and *Wigo-*, and the medial *-i-* may equally well represent a colourless composition vowel assimilated to the preceding root.

3.7. The nominative sg. of masculine and feminine *i*-stems

to Gothic *mereis*, OE *mære*, both of which are *ja*-stems. Later Norse evidence gives no way to differentiate between original *ja*- and *i*-stem adjectives, but an adequate explanation of any disparity is provided by the note above.⁵⁹

All the reliable evidence, and a fair amount of circumstantial material as well, points therefore to an ending *-ir*.

3.8. *The accusative sg. of masculine and feminine i-stems*

The only firm example is KJ 50 Strøm **hali**, even if its gender is obscure (cf. §3.1.2). Aside from this, KJ 22 Vimose chape **mari** has frequently been identified as a masculine acc.sg. adjective agreeing with **makija**. Although this would be pleasing on formal grounds, the interpretations which run along these lines are generally forced to some very convoluted twists to explain the rest of the message, including assuming word divisions which fail to coincide with what appear to be natural breaks in the text, and reading different parts of runic sequences from left to right and right to left at will.⁶⁰ Nevertheless, the slight evidence suggests an ending *-i*.

3.9. *The nominative sg. of masculine and feminine u-stems*

The evidence for this category is rather difficult to evaluate. Two likely name forms are attested in KJ 47 Svarteberg (ss)**igadur** and KJ 66 Vånga **haukopur**, but both are unfortunately divorced from any syntactic context. The problems of interpretation of the first in particular are legion; on the whole the weight of probability is that it does represent a *u*-stem nom.sg., but provides only circumstantial evidence since it cannot be demonstrated

59. §3.1.2. For this very element, cf. the difference between OE *mære* and *-mær*.

60. See, for instance, Marstrander 1952:37-44 and the references given in DR 205.

3. Nominal short stem vowels in final syllables

on external grounds but is an instance of matching attested forms to reconstructions simply because they happen to resemble each other. On the other hand, **haukoþur** has at least the virtue of apparently being a transparent formation from ON *haukr*, although other roots have been proposed. Even here problems remain, however, in that the ON *-uðr* agentive suffix appears to be almost exclusively deverbative, although the odd marginal denominative formation is attested forming nicknames like OI *Glǫmmuðr* from *glam(m)*.⁶¹ There is nevertheless a fair chance that **haukoþur** has been identified correctly as an **-ðuðr* suffix formation from one of the many bases proposed for it.⁶² Finally, KJ 79 Tomstad **warur** is perhaps to be interpreted along the lines of ‘cairn’, for which there is a possible parallel on the younger futhark Gimsøy stone.⁶³ If correct, it may be reasonable to assume that this should be a nom.sg. form, but there are no good grounds to justify the recourse of analysing it as a *u*-stem aside from the fact that it is difficult to see what else **warur** could represent.

The limited evidence therefore points tentatively towards an ending in *-ur*, which matches excellently with Gothic *sunus* and the reconstruction in Germanic **-uz*.

3.10. The accusative sg. of masculine and feminine *u*-stems

KJ 75 Kjøllevik **magu** is a clear attestation of this ending, and there are fair syntactic grounds for identifying KJ 130 Trollhättan **laþodu** as one also, even if it is a bit uncertain exactly what ‘I make the invitation’ might mean

61. See NIP:113 and Torp 1909:§29 II, Jóhannesson 1927:§116.

62. For a survey of both forms, see below §7.3.2 on the *ðu*-suffix.

63. Høst 1958:322 reads the initial part of the inscription as (...)ki osa b raisþa uar aft ..., which is then interpreted as (*Ek*) -ki *Ása b(róðir)* reisti *var* ept ... where ON *var* refers to the memorial monument raised; see further 1958:325-26 and cf. de Vries 1962:674 who has some suggestive if remote cognates like Albanian *vër* ‘grave’.

3.10. The accusative sg. of masculine and feminine *u*-stems

on a bracteate.⁶⁴ An ending in *-u* for short **-u* fits excellently with all comparative evidence.

3.11. *The nominative and accusative sg. of neuter u-stems*

The only proposed evidence for this ending comprises the many instances of the *verbum mirabile* *alu*,⁶⁵ none of which occur in any clear syntactic context apart from the rather dubious looking phrase KJ 101 *alu misurki* on the Eggja stone.⁶⁶ If the etymology linking this with the 'ale' word is correct, then it would historically speaking be a consonant stem, cf. OI *qldr*, *qldr* alongside *ql*, also OE *ealu*, *ealop* from Germanic **alup-*, but it is perfectly possible that the reanalysis to a *u*-stem had already taken place in urnordisch, or that if not we have in *alu* the direct reflex of a Germanic endingless nominative **alup*. However, all this remains guesswork until we get a clearer picture of what *alu* means and what its etymological family tree is, and until we work out some clearer idea of what syntactic and semantic role it plays in the inscriptions.⁶⁷

64. Compare the frequent appearance of forms in *laþu*, presumably the precursor of ON *lǫð*, on bracteates, and see below §3.12 and §7.3.2.

65. So KJ 29 Lindholm, KJ 48 Fosse, possibly KJ 52 Kinneve, KJ 57 Elgesem, KJ 103 Slangerup and Kläggeröd, KJ 104 Darum 5, KJ 109 Skrydstrup, KJ 119 Fünen 119, KJ 120 Schonen 1 and if Nordic KJ 46 Körlin. KJ 40 Setre *alu* is quite probably to be interpreted otherwise, see Grønvik 1987:§§1-4.

66. If correctly interpreted along the lines of 'protection against the evil-doer', then this gives evidence for the use of **alu* as a 'real' word, but any posited semantic extension from 'beer' to the 'Zauber, (magische) Abwehr' proposed as a translation in KJ:231 can scarcely be dated. However, the reading itself is not one to inspire confidence, cf. Grønvik 1985b:92-93.

67. This is assuming it is a proper linguistic word and not just nonsense syllables or merely a sequence of shapes carrying a symbolic function; I must admit my sympathies lie with the 'ale' interpretation, for which see Høst Heyerdahl 1981.

3. Nominal short stem vowels in final syllables

3.12. *The nominative sg. of feminine $\bar{o}$ -stems*

Most of the normally attributed instances of this ending are identified purely on formal grounds, e.g. KJ 58 Årstad **saralu**⁶⁸ and KJ 89 Tanem **mairl̥u**, and so can only supply circumstantial evidence for reconstructing the ending.⁶⁹ The numerous examples of KJ 116 Højstrup, KJ 117 Darum 1, KJ 119 Fünen 1 and KJ 120 Schonen 1 **laþu** are also most reasonably seen as nom.sg. forms since they appear in syntactic isolation, and the usual identification with ON *lǫð* seems fairly plausible given the appearance of the semantically parallel form KJ 130 **laþodu** on the Trollhättan bracteate (cf. §7.3.2). Nevertheless, our best guide comes in fact from the adjectival forms KJ 76 Opedal **minu**, **liubu**, which stand in agreement with one another and apparently refer also to the feminine **swestar**. According to Patrick Stiles this last form is to be analysed as a vocative rather than a nominative (see §7.12), but even assuming this is accepted, there is no evidence to suggest that the $\bar{o}$ -stem declension differentiated formally between the two cases.⁷⁰

Aside from this evidence, KJ 50 Strøm **haþu** continues to defy convincing analysis. Krause's interpretation as 'newly mown grass' from **hawip̥u* is pleasing from a semantic point of view, though the use of the **-ip̥ð* suffix to form a concrete noun is perhaps slightly unusual.⁷¹ However, such an interpretation is rather difficult to justify on phonological grounds, since it presupposes medial syncope after a short syllable and loss of the semi-vowel despite the fact that the text preserves stem vowels intact

68. As interpreted by Høst 1987:159.

69. The name read by Antonsen 58 on KJ 110 Börringe **tantulu** looks too strained to credit fully, even if the dubious bind-rune is accepted.

70. The form **birnggu** in the same inscription is also often taken as an $\bar{o}$ -stem nom.sg., but the correct transliteration and interpretation of this part of the sequence remain undecided.

71. See Krause 1971:§25,4, §90,1 and Torp 1909:§27,4 II.

3.12. The nominative sg. of feminine δ -stems

as in **horna**.⁷² It may have been these formal difficulties which led Antonsen 45 to propose his alternative reading of a form **haþu* 'battle', which ignores the question of semantics too much to be credible.

This evidence suggests, at least tentatively, a nom.sg. ending *-u* for urnordisch δ -stems. However, in conclusion mention must also be made of the awkward KJ 116 Gurfiles **laþa** for more usual **laþu**, which has been analysed as a specifically Gothic feature by those who accept the reading. But as Krause admits,⁷³ the final rune is very corrupt and seems to be read as *-a* more out of a belief that it cannot reasonably be a *u*-rune than because it is justified. We may therefore feel safe in joining Antonsen in rejecting the form as too uncertain for linguistic purposes.

3.12.1. *Finally, some etymology.* Comparative evidence suggests that the δ -stem nom.sg. would have been the only case and number marker in the urnordisch declension with a short vowel.⁷⁴ As is well known, Northwest Germanic appears to have shared in a development of early Germanic **- δ* to **-u* in absolute finality, a development that Gothic avoided.⁷⁵ The parallel split in the development of the early proto-Germanic sequence **-om-* to Northwest Germanic **-um-*, East Germanic **-am-*, was noted above (§3.5), but was not as useful for current purposes in having no

72. It seems undesirable to make appeal to the abnormally early syncope and loss of semi-vowel assumed by Grønvik 1976:140 for sequences of short vowel plus **-wi-*. To posit such a development so early is scarcely reasonable, since there is no reliable evidence in its favour and little which in fact indicates that **i* was preserved elsewhere after short syllables into the Viking age as **u* may have been, see below §9.5.2.

73. 1971 no. 40.

74. Although later internal Norse evidence suggests that the acc.sg. may also well have done so, see below §6.2.

75. So we get ON *gjof*, with apocope and *u*-umlaut, and OE *giefu* corresponding to Gothic *giba*. On the other hand, the final vowel of OHG *geba* seems to be analogically extended from the accusative; see Braune~Eggers 1987:§207 Anm. 2 for some archaic relic forms in *-u*. The expected form is attested in the pronominal ending *diu* and thence the adjectival *blint(i)u*, see §287 and §248 Anm. 6.

3. Nominal short stem vowels in final syllables

attested reflexes in classical urnordisch inscriptions. Not only does the runic evidence confirm this early raising in absolute finality, but it is also notable that only spellings with <u>, never *<o>, occur, which is of great significance for the analysis of the urnordisch short vowel system. As a result there is no sign of any distinction within urnordisch between unaccented *u of diverse origins, derived on the one hand from early proto-Germanic *u and on the other from *o/ø in certain phonological environments.

3.13. *The nominative pl. of consonant stems*

This ending is clearly preserved in KJ 72 Tune **dohtrik**. Even though the other Germanic languages do not appear to preserve this same combination of zero grade stem plus ending *-iz in the *r*-stem declension, consonant stem forms like ON *fætr*, OE *fētr* confirm the Germanic ending *-iz reconstructed from IE evidence like Greek πατέρες.

3.14. *Urnordisch forms lacking stem vowels*

Forms in urnordisch inscriptions which appear to be missing stem vowels have always attracted much attention and a large number of alternative interpretations and emendations. An examination of the most frequently cited instances reveals that they are most common in the very earliest stratum of runic writing, i.e. on portable objects from the 3rd century at the latest, but are less frequently to be found in the later runic tradition and never on stone. Therefore they cannot easily be seen as marking the beginnings of syncope, but instead it seems plausible that the distribution pattern of the evidence may well have some other significance. Due to their antiquity one common method of explaining the attested forms has been to invoke the presence of archaic morphological features which are not

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attested in Old Norse but which can be inferred by comparative reconstruction.⁷⁶ On the other hand, a non-linguistic approach is also possible if we take into account the well-known views of Erik Moltke concerning the unreliability of forms inscribed on portable objects by illiterate craftsmen rather than on stone by competent runesmiths,⁷⁷ and certainly Moltke's argument that the forms KJ 11 Værløse *alugod* and KJ 12 Gårdlösa *unwod.* are corrupted due to the exigencies of space available for the text is quite persuasive.⁷⁸ So how real a problem for the philologist are the supposed forms without stem vowels, or are they all just fantasies derived from unreliable copies? Of the linguistic attempts at explanation, the following three methods are the most common.

3.14.1. *Non-Scandinavian Germanic dialects attested in the inscriptions.*

Firstly, it is always possible to appeal to distinct branches of Germanic which show divergent phonological developments in final syllables. So KJ 23 Vimose sheath-mount *awps* has since Marstrander frequently been interpreted as a specifically East Germanic form with syncope of the stem vowel and final *-s* for expected **-r*.⁷⁹ Unfortunately the reading seems too uncertain to rely upon,⁸⁰ and much the same applies to attempts to read

76. For instance, the ideas that urnordisch preserved a formally distinct vocative case, or that the athematic noun declension was still well maintained; for both of these see below.

77. A basic statement of this approach, founded mostly on the testimony of the Scandinavian bracteate inscriptions, can be found in Moltke 1985:113-16.

78. 1985:123-26, 128.

79. Marstrander 1952:60-63. Marstrander was followed by Krause 1971 no. 119 and Antonsen 95, and later scholars have tended to follow them in turn, e.g., albeit cautiously, Euler 1985:12. On the other hand Grønvik 1985a:183 note 21 rejects the reading as unreliable.

80. See also DR 207a and Moltke 1985:146 note 9 where some doubt is expressed as to whether this sequence can be read as runes at all; that Marstrander was right to read sense into these scratches is even more explicitly denied by Stoklund 1987:297-98.

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sense into the inscription on the Næsbjerg clasp (KJ 13) along equivalent lines.⁸¹ Due to the find location in the erstwhile Soviet Union it might be thought more reasonable to propose an East Germanic dialect for the language of the Kowel spearhead inscription KJ 33 *tilarids*, but the exact transliteration is much debated.⁸² Nevertheless, to an extent the tactics of a) resorting to divergent branches of the Germanic languages and b) appealing to the Moltkian notion of smiths as runic incompetents dovetail well with the observation that forms without stem vowels tend to appear on portable objects.

Appeals to West Germanic dialect forms have on the whole been less successful. Although Antonsen pointed out correctly that KJ 105 Skodborg *alawin* should not exhibit early loss of the stem vowel **-i-* as often assumed, since it followed on straight from the root, his proposal that it represented a West Germanic development was unconvincing since the relevance of the OHG data he relied on seems dubious.⁸³ Likewise his interpretation (no. 100) of KJ 11 Værløse *alugod* along similar lines, only this time with loss of final **-a*, is still not a very pleasing escape route given the antiquity of the inscription, even if there is less evidence for retention of the stem vowel **-a-* into West Germanic.⁸⁴ In a sense the

81. For example, Antonsen 94 emends a reading *warawnis* to **warawins* and analyses it as an East Germanic form with the reflex of Germanic **winiz* 'friend' as the second element, whilst Marstrander 1952:96-98 reads much the same text but from right to left; cf. also the different readings and interpretations offered by Krause 1971 no. 68 and Moltke 1985:126-28.

82. The uncertainties surrounding this reading are illustrated by Westergaard 1981:190 ff., even though his alternative transliteration 1981:227-71 and interpretation 1981:281-94 might be considered as even more unlikely.

83. See Antonsen 1987:24, 1975b no. 103 and 1969-70 as against Stiles 1984:33. This approach was always going to seem implausible given attested forms like OHG *Alwini*.

84. Some interesting forms appear in the Malberg glosses to the Lex Salica. Walde 1900:23 quotes *focla*, *chunna* for OHG *fogal*, *hunt* 'hundred' which he believes show the final stem vowel **-a* preserved. However, despite their ubiquitous status in handbooks these forms are distinctly unreliable. Dahl 1938:82-83 follows

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difficulties involved with appealing to divergent West Germanic dialects are to be expected given the widespread view that the earliest runic inscriptions represent a common Northwest Germanic language group (cf. above §2.1).

3.14.2. *Putative vocatives*. A different though not necessarily incompatible approach is to assume that urnordisch still maintained a formally distinct vocative case, since, for example, the *a*-stem vocative in IE **-e* could reasonably be assumed to have been apocopated in primitive Germanic. Despite some reservations, such an analysis was adopted by Krause for forms like KJ 11 Værløse *alugod* and KJ 105 Skodborg *alawid*, *alawin*.⁸⁵ Likewise Stiles forcefully argued the case for a vocative in urnordisch and berated the school of thought which preferred to view texts as corrupt rather than be willing to admit the existence of a distinct vocative case.⁸⁶ There remains, however, an uneasy distinction between agreeing that it is reasonable still in urnordisch to posit the vocative as a separate formal category, and then proceeding to explain a fair number of disparate and sometimes fairly unintelligible forms as representing this category when viable alternative routes are open.⁸⁷ Nevertheless, a distinct vocative case certainly remains a convenient assumption, even if some doubts must remain as to whether it has been invoked correctly in the relevant inscriptions.

Baesecke 1935:45-46 in thinking they are Latin endings, and that *chunna* is probably a plural.

85. Krause 1971:§27, in the final case ignoring the difficulty that even in the vocative case a stem vowel **-i* should not have been lost in urnordisch, according to the conventional wisdom at least. Putative vocatives have been identified in these forms on the Skodborg bracteate for a long time, cf. von Friesen 1924:83-84 with references.
86. Stiles 1984:23-34,27-28.
87. Many scholars have had difficulty swallowing the notion of an urnordisch vocative; so, for instance, on the forms in the Skodborg inscription (KJ 105) Moltke 1985:118 asserts that 'it is a last resort to assume they are forms of address — something in itself unlikely in amulet language'.

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3.14.3. *Athematic nouns*. A third method, which was used extensively by Elmer Antonsen in his corpus, was to identify awkward forms with athematic nominal formations, as illustrated by his interpretations of KJ 21 (no. 3) Thorsberg shield-boss **aisgr**, KJ 74 Reistad (no. 41) **unnam(r)** and KJ 12 (no. 6) Gårdlösa **unwod(r)**. In a sense, the assumption of athematic formations is not one which should arouse too much suspicion, since such a declensional pattern is still attested, if sparingly, throughout the Germanic languages. Nevertheless, in practice the onus of proof remains on the shoulders of those who would wish to work with a productive athematic declension in urnordisch, since whenever recorded it has all the signs of a marginal and declining class. None of the recorded forms can be remotely identified with athematic roots, whilst they are all only very tentative readings. KJ 21 Thorsberg shield-boss **aisgrh** is more reasonably dismissed as inexplicable,⁸⁸ whilst the final -r runes in Antonsen 6 and 41 are very dubious and in this form unique to his readings.⁸⁹ Whatever its theoretical merits, there is little evidence to speak in favour of this approach.

3.14.4. *Conclusion*. Although this discussion has scarcely reached any conclusions as to how to treat the problem, it has at least hopefully been shown that it is a marginal issue in the field of urnordisch stem vowels, relying mostly on dubious readings of troublesome inscriptions. Only the text on the Skodborg bracteate (KJ 105) gives any sort of syntactic context for our candidates, and here the most natural approach would probably be to analyse both **alawin** and **alawid** as dat.sg. forms if such an interpretation could be made to fit formally.⁹⁰ In addition, this bracteate is by far the

88. As by Moltke 1985:98-99.

89. The -r in Antonsen 41 **unnamr** is dismissed by Høst 1977:153 as a myth, whereas the final symbol in Antonsen 6 **unwodr** has the shape ʀ and there seems to be no particularly convincing reason to read it as -r, whilst Krause's reading KJ 12 **unwodir** looks equally suspect.

90. A position taken by Jóhannesson 1923:§126 Anm., §132 and no. 55, who assumes that a state of affairs very similar to manuscript Old Norse existed already at the

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latest of our texts lacking stem vowels⁹¹ and so might be expected to show incipient apocope, although on the basis of the retained stem vowel in **auja** Grønvik includes Skodborg with his inscriptions 'i klart urnordisk språk'. A common sense consideration also raises some uneasiness that we should have two different names which look so similar; is it not equally possible that these are the 'same'?⁹² However, assuming the inscription is not corrupt, either simply due to problems of transmission or down to compression to enable the text to be fitted exactly into the outer ring of the bracteate, then it must be admitted that so far it has refused to unlock its secrets to us. On the whole, given the dubious nature of the evidence discussed in this section, urnordisch forms without stem vowels must be considered only very insecurely attested and even less certainly explained when they do appear.

time the bracteate inscription was written. Might we invoke elision since the endings mostly precede vowels?

91. Bakka's dating scheme in Grønvik 1987:§35.2.4 puts such B-bracteates to the period between c. 480-525/550.
92. As, for example, envisaged by Bæksted 1943:21-22. This is the only virtue of the 'imaginative' interpretation proposed in Maaløe 1961.

4. NOMINAL STEM VOWELS IN COMPOSITIONAL SYLLABLES

4.0. *The background*

In theory, at least, compositional vowels should reflect the stem vowel of the first element of the compound; however the theory only partially matches up with the practice. Already in Wulfilian Gothic, although the compounding process often uses the stem vowel correctly as in *weinagards*, *harduhairtein*, it sometimes neglects to as in *allwaldands*, where syncope appears to have struck, and also in *motastaps* and similar formations where feminine *ō*-stem nouns use medial *-a-* rather than **-ō-*.¹ Since already in proto-Germanic we can see word-formation moving away from a stem- to a root-based system (see §7), this confusion is not really surprising. However, due partly to the preponderance of compounded personal names in the early inscriptions, we have a (relatively) large body of evidence to test the situation as regards compositional vowels in urnordisch.²

4.1. *Substantive a-stems as first element*

According to fairly conventional interpretations, we can identify *a*-stem substantive first elements in KJ 43 Gallehus **hlewagastir**, KJ 60 Vetteland **flagdafaikinar**,³ KJ 67 Noleby **raginakudo**, KJ 69 Rosseland **agilamudon**,

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1. Seebold 1968 gives an interesting, if not wholly convincing, account of some of these phenomena, although Carr 1939:274-79 is critical of such approaches.
 2. Although the problem frequently arises that we have no real way to check the expected quality of the compositional vowel, since many of the interpretations depend not so much on the recognition of actually recorded lexical items but more of vaguely identified semantic roots, cf. §4.8 below on KJ 13a Nøvling **bidā-**.
 3. Even though this does not perhaps fit quite as comfortably into the notion of a

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KJ 73 Rō swabaharjar,⁴ s(a)irawidar, stainawarijar, KJ 87 Skärkind skipaleubar, KJ 91 Törvika A ladawarijar, KJ 127 Seeland 2 farauisa⁵ and KJ 136 Tjurkō walhakurne. In addition, the first element of KJ 99 Möjbro frawaradar has been included as an *a*-stem on the basis of the medial *-a-* and the Sanskrit cognate *pravá-*.⁶ Although only extended forms like the ON *ja*-stem *Freyr* and the OE *n*-stem *frēa* are actually attested in the Germanic languages, the common link appears to be a proto-Germanic **frawa-*, possibly an adjective later substantivised. All the evidence then fits well with the comparative picture which assumes medial Germanic **-a-* for this class, whilst there are no signs of a retained labial quality to the medial vowel descended from IE **-o-*.⁷

4.2. Substantive *ja*-stems as first element

Several plausible instances of this category are known.⁸ The two earliest (though not very early since they both appear on bracteates) are probably KJ 127 Seeland 2 hariuha and KJ 136 Tjurkō kunimudiu, to which we

noun plus adjective compound as is usually thought, there are parallel formations within the field of poetic diction such as ON *goll(h)roðinn*, OE *goldhroden*.

4. Regarding the stem vowel of the tribal name *Swabians*, classical *Suebi*, Köbler 1989:514 has a Gothic form **Swebos* reconstructed on the grounds of place-names, whilst OHG *Svab*, *Svaba*, ON *Sváfar* and partially OE *Swāfas* alongside *Swāfe* all suggest original *a*-stem declension as well; see von Friesen 1924:12-14.
5. Assuming the first element is equivalent to ON *fār* 'danger' rather than the root of *fara* 'go' as in Antonsen 71. On verbal roots in this position, see below §4.8.
6. By Krause 1971:§32,3.
7. As possibly recorded in classical authors. Streitberg 1896:§55, for instance, notes forms like *Charioualdus*; however Carr 1939:271-72 has a more plausible explanation for the forms in *-o-* alongside *-a-*.
8. Unfortunately, KJ 80 Rävsa hariw/pulfs shows signs of the effect of syncope and is quite possibly to be analysed as a younger futhark inscription, and so cannot therefore be expected to give us a clear picture of the compositional syllable.

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can add the two Blekinge inscriptions KJ 96 Stentoften **hariwolafR** and KJ 98 Istaby **hariwulafa** which appear to make some semblance of preserving medial compositional syllables even though they show distinct signs of syncope. This situation, with uniform *-i-* representing expected **-ja-*, is partially reminiscent of the situation in Gothic, cf. the *ja*-stem *arbi*, *arbja* but *arbinumja*, but whereas the Gothic evidence clearly reflects a tendency to eliminate stem vowels after long syllables, the examples above contain short roots. However, the fact that all our urnordisch evidence consists of only two different lexical items is revealing when we bring in the other Germanic evidence. It seems clear that the first element in KJ 136 Tjurkö **kunimudiu** was already within proto-Germanic fossilised as a first element **kuni-* developing to OE *Cyne-*, OHG *Kuni-* without West Germanic gemination.⁹ Streitberg at least assumes the same for Germanic **hari-* from the noun **harja-*, but this appears less certain, since Carr quotes recorded names like *Hariobaudes*, *Chariovalda*, and reckons 6th century forms like *Charibertus* show the development of medial syncope.¹⁰ The evidence for positing a Germanic form **hari-* without stem vowel is scarcely compelling, yet KJ 127 Seeland 2 **hariuha** at least cannot reasonably be assumed to show medial syncope (at least as we normally understand it) from **harja-* given the retention of stem vowels elsewhere.¹¹ We shall see below there is evidence for the retention of medial **-ja-* as a compositional syllable into urnordisch; therefore the most plausible explanation seems to be that given by Antonsen 71, that the composition vowel has been lost before the initial vowel of the following syllable.

9. See Streitberg 1896:§67 B and Carr 1939:270.

10. 1939:272, as recorded in Förstemann 1900:766,779, Schönfeld 1911:126; see also Krause 1971:§48,3.

11. Although the frequent divergent appearance of this first element as *Har-* in Old Norse personal names, as in *Haraldr* alongside *HerjólfR*, seems to be rather better explained by assuming a form **Hari-* already in urnordisch alongside **Harja-*.

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4.3. Substantive *i*-stems as first element

The most reliable instance of this class is KJ 86 Berga **saligastir** to which can be compared the *i*-stem nouns ON *salr*, OE *sele*. On the face of it, no less obvious is KJ 30 Garbølle **hagiradar**, which is reminiscent of a perfectly good ON *i*-stem, *hagr*. However, there are also attested two forms, KJ 55 Valsfjord **hagustaldar** and KJ 75 Kjøllevik **hagustadar**, which exhibit a first element with a different stem vowel. An examination of the etymological evidence reveals a large number of confused and conflated stem formations from the Germanic root **hag-*, which seem best explained by assuming that distinct semantic roots have fallen together;¹² therefore this element will be dealt with in the the next section on the *u*-stem formations. Nothing speaks against the unity of a compositional vowel *-i-* for *i*-stem first elements.

4.4. Substantive *u*-stems as first element

This class of stem formation is well and securely attested in KJ 10 Himlingøje 2 **widuhudar**, probably KJ 20 Thorsberg chape **owlpupewar**, KJ 27 Kragehul spear-shaft **asugisalas**, KJ 77 Myklebostad **asugasdir**, KJ 90 Sunde **widugastir**, Illerup shield-mount 3 **lagupewa**, and in later post-syncope inscriptions KJ 95 Gummarp **hāpuwolafa(...)**, KJ 96 Stentoft **hāpuwolafar** and KJ 98 Istaby **hāpuwulafar**, **haeruwulafar**, all good *u*-stems.¹³ On formal grounds, i.e. the fact they have *-u-* in the middle, KJ 11 Værløse **alugod** and KJ 72 Tune **woduride** are also generally ascribed

12. As assumed, for example, by Blöndal Magnússon 1989:299, as opposed to de Vries 1977:203.

13. For the misleading parallel to the **hāpu-** prefixes seen in KJ 75 Kjøllevik **hadulaikar**, see below on the adjectives §4.7.

4.4. Substantive *u*-stems as first element

to this class.¹⁴ For the difficulties surrounding **alu** and its stem formation I refer to the note above (§3.11). On the other hand, it seems uncertain whether the base in KJ 72 **woduride** is the adjective ‘raging’, the noun ‘mind, fury’ or the name of the divinity *Óðr*, and likewise whether it would make any difference to the stem formation. The ON noun *óðr* appears in the genitive both as *óðar* and *óðs*,¹⁵ which is a pointer at least in the direction of its being an original *u*-stem but is scarcely conclusive. According to internal evidence, then, we must assume either that this nominal was once a *u*-stem or that the attested form exhibits confusion between the expected composition vowel of other classes and the **-u-** proper to *u*-stem nouns. Happily, there is good reason to argue that *óðr* may well have started out as a *u*-stem. The most westerly IE languages all show a parallel formation on the root **wāt-*, as in Latin *vātēs* ‘seer’, Old Irish *fáith* ‘prophet’ (*i*-stem) as well as Middle Irish *fáth* ‘prophecy’ (*u*-stem), Welsh *gwawd* ‘poem’, and when we try to unite the semantic range, the most likely etymology must be the laryngeal root **weH-* plus the *-tí/-tú-* extension which formed both *nomina agentis* (Latin and Goedic) and *nomina actionis* (Goedic and Brittonic); both of these senses are possibly attested in the ON noun as opposed to the adjective *óðr*.¹⁶ The parallels in sense and development of the IE *ti-* and *tu-* suffixes in Germanic are well known,¹⁷ and it is therefore perfectly legitimate to posit an urnordisch *u*-stem **wōðu-*, since the productivity of the *tu-* variant in particular is

14. Cf. Krause 1971:§77.

15. See Noreen 1923:§358,2.

16. Note that Mayrhofer 1956-80 III:132,184-85 claims Sanskrit *vātati* ‘inspires’ may be related to the root **weH-* as in *vātah* ‘wind’ and he is followed by Lehmann 1986:409 on *wōps*, but there are phonological difficulties, cf. also Pokorny 1959:1113. Although it is common to link the two roots, there is no reasonable way to explain the root vocalism of Latin *vātēs* without assuming a laryngeal root, forcing Pokorny to suggest it may be a loan from Celtic, an idea which seems to have found little favour.

17. See Meid 1967:§§122-24 and below on the *ðu-* suffix, §7.3.

4. Nominal stem vowels in compositional syllables

attested by the later ON *u*-stem suffix *-uðr*, by false re-segmentation from **-ð-ðu-*.¹⁸

Aside from this evidence, the two forms KJ 55 Valsfjord **hagustaldar** and KJ 75 Kjølevik **hagustadar** noted above remain to be accounted for. The first element appears to be related to the weak noun ON *hagi*, OE *haga* 'enclosure, pasture' and in West Germanic can be seen to vacillate between the *u*- and *a(n)*-stems in OE *haguþorn*, *hagu-/hægsteald*, OHG *hagu-/hagastalt*. Why an older *u*-stem should have fossilised in these forms is unclear, though one possibility would be the growing opaqueness of the compounds. Nevertheless, it seems reasonable to suppose that in KJ 55 Valsfjord **hagustaldar** we have the exact equivalent of OE *hagusteald* and that the medial *-u-* is therefore etymologically justified. Explicitly because there was no longer any nominal base in **hagu-* may be the reason for the word being folk etymologised into OI *haukstall(d)r*, possibly also the name *Hqskuldr*, and nynorsk *haugstall*.¹⁹ At any rate, a first element with the form **hagu-* was clearly inherited by Norse from Northwest Germanic. For KJ 75 Kjølevik **hagustadar**, the most likely interpretation is that this is the same form with orthographic omission of the liquid in the sequence **-ld-*.²⁰

A unified picture therefore presents itself with *-u-* as the regular composition vowel for *u*-stem substantives.

4.5. Substantive *ð*-stems as first element

No clear instances of *ð*-stem first elements are attested in classical urnordisch texts, but from the transitional Blekinge inscriptions we do have

18. Torp 1909:§29, Wessén 1965:55-57.

19. See Blöndal Magnússon 1989:310.

20. For some parallels like DR 55 *harats*, see Salberger 1987:12. Salberger's arguments are more plausible than the proposals of Erik Noreen 1945 and most recently Elmevik 1987 that this is an example of their 'inskrivna runor'; see Grønvik 1981:211-12 for some criticisms.

4.5. Substantive *ō*-stems as first element

KJ 96 Stentoften **weladud** and KJ 97 Björketorp **weladaude**, **uþarabasba**; this last instance is perhaps not as certain as the others, since it could equally well on syntactic grounds be taken as a sequence of acc.sg. noun plus finite verb. Nevertheless, this picture tallies with that gained from elsewhere within Germanic, in that *ō*-stems generally show a composition vowel in **-a-*.²¹

Despite this agreement, some scholars have analysed the **wela-** forms as the earliest attested Norse examples of secondary compounds, formed from the gen.pl. of the noun seen in OI *vel*.²² Although in principle there is nothing to prevent secondary compounds being this ancient, there seems no reason to differentiate these Blekinge forms from others in the same inscriptions which preserve compositional vowels. Nor, for Stentoften in particular, does such an argument fit well with the continued use of *<o>* for original long **ō* (cf. below §5.9, §5.10). If this really was a secondary compound we might expect ****welo-**, and in short such a view is both unnecessary and awkward.

4.6. Substantive *s*-stems as first element

There is only one attested form in the urnordisch inscriptions for which an older *s*-stem can be reconstructed as the first element, that is KJ 59 Ellestad **sigimarar**. It seems likely that the *s*-stems were originally athematic in compounds as in *Dagistheus*, *Sigismerus*;²³ where then is the expected first element **sigis-*? In fact, the root final **-s* seems to have vanished back in proto-Germanic,²⁴ and an urnordisch compositional stem

21. As in Gothic *motastaps*, see Meid 1967: §§20-21.

22. As for instance Kock 1921a:23 and Carr 1939:311.

23. See Carr 1939:273.

24. As noted by Krause 1971: §28,8. Thus we get Strabo's Σιγιμῆρος, see Förstemann 1900:1329, and the Gothic names in *Sige-* alongside *Sigis-*, see Köbler

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**sigi-* is also supported by later Old Norse evidence, where in proper names and poetic compounds the form *sig-* occurs without radical *-r-*, thus *Sigurðr*, *Sigfǫðr*, *sigfreyr*.²⁵ There is therefore no severe internal contradiction here.

4.7. Adjectives as first element

The inscriptions which look most likely to be interpreted as having adjectives as their first elements are KJ 33 Kowel **tilarids**, KJ 53 Kårstad **aljamarkir**, KJ 72 Tune **witadahalaiban** and KJ 75 Kjøllevik **hadulaikar**. Although they form a disparate group, they seem to suggest that in urnordisch compounds adjectives followed their stem formation just like substantives and had not yet been levelled out as in the later Norse dialects. The only clear *a*-stem is KJ 33 Kowel **tilarids**,²⁶ if we assume that the first element is directly cognate with Gothic *gatils* 'suitable', OE *til* 'good'. However, since most scholars tend to appeal more directly to the root **til-* than to any particular formation from that root, this evidence is fairly circumstantial. On the other hand, KJ 53 Kårstad **aljamarkir** is clearly correct etymologically for **alja-* and is the proof that medial **-ja-* was preserved as a compositional syllable into urnordisch (cf. §4.2). For KJ 75 Kjøllevik **hadulaikar**, I prefer to follow Salberger's admittedly uncertain interpretation of the first element as the adjective 'hard', which seems to have been an original *u*-stem to judge from Gothic *hardus*, pleasingly if

1989:699.

25. See Lex.:493-95.

26. Which is actually only ever interpreted on the basis of it being East, not North, Germanic in form, cf. above §3.14.1. Even assuming the transliteration and interpretation are correct, it is not certain that the language of this inscription has any connection with urnordisch.

4.7. Adjectives as first element

distantly also Greek κρατός.²⁷ Finally we arrive at the *bahuvr̥thi* compound KJ 72 Tune **witadahalaiban** ‘warder of bread’.²⁸ Although plainly the first element is closely related to the present participle formation, it is equally clearly such an ancient and marginal type that there is no need to assume that such forms within compounds underwent the same inflectional restructuring as the present participle; indeed, ON compounds of the *hnoggvandbaugi* type may confirm this. The present participle was originally athematic, traces of which can still be seen in the *i*-umlaut of plurals like ON *búendr*, *bændr* from *bó(a)ndi*,²⁹ and therefore this may represent the sole instance of composition from an athematic first element in the urnordisch inscriptions. Such formations seem to have frequently introduced a medial **-a-* in this position already within proto-Germanic, thus Gothic *broþralubo*, *nahtamats* and OHG *manaheit*, so the form **witada-** is just what would be expected.³⁰

4.7.1. *The ‘ginn-’ element.* Of particular interest are the various forms of the prefix seen in OI *ginnregin* and apparently attested in KJ 27 Kragehul spear-shaft **ginu-**, KJ 96 Stentoften **ginoronor** and KJ 97 Björketorp **ginarunar**. Unfortunately despite its (relatively) widespread attestation, this element remains morphologically extremely obscure. KJ 27 **ginu-** appears in the middle of the famous **-ga-** bind-runes on the Kragehul spear-shaft and its function is wholly uncertain; it may perhaps be read as a simplex word cognate with OE *ginn* ‘spacious’ or OI *ginn* ‘deceit’. It also appears, probably as a prefix, in the parallel inscriptions of Stentoften and

27. 1987:13-15.

28. See Carr 1939:174 for other examples of this type like Old Norse *hnoggvandbaugi*, which are generally recorded as unique epithets. As he notes, a formally equivalent compounding method is attested also in Sanskrit, see Burrow 1973:216.

29. See Noreen 1923:§422.

30. As noted by Meid 1967:§§20-21, although Jasanoff 1978:§76 appears to assume athematic compounding here.

4. Nominal stem vowels in compositional syllables

Björketorp as KJ 96 **ginoronor** and KJ 97 **ginarunar**, where we must account for the difference in representation.³¹ It seems quite possible to follow Antonsen and account for the variation by assuming the compositional stem vowel had been lost (or perhaps merely reduced to [ə]?), and that these examples show the re-introduction of a parasite vowel.³² The question turns on how much absolute trust we put in the two forms. If we assume **ginnu-* to be the original shape, then we might explain KJ 96 Stentofen **ginoronor** as exhibiting the same tendency to represent /u/ by <o> as can be seen elsewhere in the inscription, most notably in this very form **-ronor** for later **-rúnar**. However, one of the most convenient ways of explaining the unexpected spelling of /ū/ with <o> in **-ronor** seems to be to invoke both dittography and anticipation, whether phonetic or orthographic, from the instances of <o> in the syllables preceding and following, which begins to make the analysis look like a neat circle. On the other hand, the correspondence between KJ 96 **gino-** and KJ 97 **gina-** exactly parallels that seen in the final syllable between KJ 96 **-ronor** and KJ 97 **-runar**, which appears to represent the lowering of unstressed **ō*, possibly concomitant with shortening. It seems therefore most reasonable to assume that the Stentofen and Björketorp inscriptions, which already exhibit clear signs of syncope under certain circumstances, show an equivalent tendency to reduce the number of distinctive compositional vowels, though whether this might have taken place through reduction to schwa or levelling of a uniform medial **-a-* is uncertain.

31. I can find little sympathy for the suggestion of Krause 1971 no. 7 that we are dealing with the reflexes of slightly different formations, i.e. that **gina-** is for urnordisch **ginna-* < **ginwa-* whereas **gino-** represents an original **ginu-*; he himself has little patience with this idea elsewhere in the book, cf. §48,4 where he talks of 'weiterer Schwächung des Fugenvokals'.

32. 1975b:§5.3 and nos. 119 and 120.

4.8. Verbs as first element

4.8. *Verbs as first element*

It is fairly difficult to identify verbal first elements in the compounds of the urnordisch corpus. Krause relates the first element of KJ 13a Nøvling **bidawarijar** ‘mit nicht ganz klarer Bildung zu urn. **bidjan*, an. *biðja*’ and quotes in support ON *biðkvæn*,³³ but this seems unsatisfactory on both semantic and formal grounds. However, Antonsen’s construction of a noun **biða* ‘oath’ on the analogy of Latin *fidus*, *foedus* also fails to carry any real conviction, although it is formally more pleasing.³⁴ It is in fact rather difficult to agree with Moltke’s cheery words that ‘the elements of the name are well known’;³⁵ the picture still seems very obscure. Aside from this, the only etymological root available to analyse the first elements of the compounds KJ 96 Stentoften **heramalas(ar)** and KJ 97 Björketorp **haeramalausr** appears to be that seen in OHG *gehirmen* ‘to rest’.³⁶ However, this verb is plainly a secondary denominal formation unattested in Norse and so the morphological structure of the base **h(a)erama-** remains unclear even if the sense has been guessed correctly.

There are in fact no unambiguous signs that verbal roots could act as the first elements of compounds in urnordisch, which is exactly what would be expected according to the traditional wisdom, which holds that the compounding type of verb plus nominal may well not have existed in primitive Germanic but was a later innovation.³⁷

33. 1971:§74 Anm. 1 and no. 69.

34. 1975a:241.

35. 1985:129.

36. See KJ:215 and DR:664-65 following Lindquist 1923:184-86; Lindquist in fact proposes the base noun **herma-* or **hermō-* as the first element rather than the verb, but there is naturally no way of checking the expected stem vowel of a hypothetical form.

37. See Carr 1939:175,196, also Meid 1967:§33.

4. Nominal stem vowels in compositional syllables

4.9. The 'woe' prefix

The two instances of this **waja-* prefix have been kept aside since it is uncertain whether it was actually used as a separate noun or adjective in its own right or simply as an interjection.³⁸ The most generally accepted example is KJ 20 Thorsberg chape **wajemarix** which has often been understood as an equivalent compound to Gothic **wajamēreis*. Nevertheless, there are numerous alternative interpretations and rather little on which to base a decision between them.³⁹ Therefore, if, for the sake of argument, we accept von Grienberger's interpretation of **wajemarix** as a nominal compound along with Krause, it is really more of an intuitive decision based on the striking parallel with the Gothic formation.

What significance might this form then have for the status of urnordisch composition vowels given the disparity between KJ 20 Thorsberg chape **waje-** and Gothic *waja-*? Quite naturally Krause pointed to a parallel phenomenon following the palatal semi-vowel in the Gothic name *Sunjaifrithas*, glossing the Latin form *Suniefredus*, from *sunja*.⁴⁰ Yet confirmation for early fronting of the sequence **-ja-* in this fashion is not easily found for Norse, and according to the authorities it is a medieval

38. Cf. Gothic *wai*, NHG *weh*, ON *vei* alongside Gothic *waja-*, ON *vá-*. Whilst there also appears to have been a Germanic noun **waiwa-*, cf. OE *wāwa*, *wēa* and the Finnish loan *vaiva*, it seems more likely that ON *vá* 'woe' is from **wanhu* as in OE *wōh*, cf. von Friesen 1901:9-12,30 who concludes that original **-aiw-* gives Old Norse *-æv-*, and is followed by Noreen 1923:§97,3 and §175,4.

39. A well-known proposal was that put forward by Marstrander 1952:10-13 who took the sequence **waje-** as a present subjunctive of the verb seen in OI *vægja* 'to spare', although his own reservations led him to retract the interpretation. In similar fashion Grønvik 1985a:187-91 argued that **waje-** was an imperative of a class III verb **wajēn*, based on the root of ON *vei*; the proposed sense 'lament, cry' certainly tallies well enough with the apparent stative function of this class of verbs in primitive Germanic. Then again, we could side with Antonsen 2 who reads **waje-** as a dative neuter noun.

40. 1971 no. 99, see also Köbler 1989:701 and Förstemann 1900:1371.

4.9. The 'woe' prefix

phenomenon both in Old Swedish and the *skånsk* dialect of Old Danish.⁴¹ This does not necessarily prove anything, of course, since such a phonetically natural development could be a purely local phenomenon, which becomes particularly relevant if Ilkjær and Lønstrup are correct in suggesting that the inscription comes from an area more suited to a West Germanic dialect (see above §2.1.2). Whatever the conclusions reached on these points, it seems unfounded to include any vowel phoneme represented by <e> as a unit alongside those spelt <a, i, u> capable in its way of forming compositional syllables. This conclusion receives support from the plausible case put forward by Antonsen that KJ 82 Saude **wadaradas** should in fact be read as **wajaradas**, and so provide another attestation of our **waja-* prefix, only spelt correctly this time.⁴² With only the Gothic *waja-* guiding our hand as regards stem vowel, a form KJ 82 Saude **wajaradas** would supply welcome confirmation that the *-je-* in KJ 20 may be seen as a purely secondary development.

4.10. Concluding remarks on compositional syllables

In general, the urnordisch evidence complements the picture which can be gleaned from comparative Germanic philology. The *i-*, *u-* and *s-*stems remain separately defined, but elsewhere **-a-* appears to have spread to supply the connecting syllable in compounds of other stem classes.⁴³ This view fits well with the urnordisch evidence and also might help to explain the fact that in all the suggested verbal or marginal first elements noted

41. Noreen 1904:§144, Brøndum-Nielsen 1950-73 I:§205.

42. 1975a:237-38, although at the same time his argument that the compound reading of **wajemarix** cannot be correct since the older runic inscriptions show no sign of any progressive palatalisation of **-a-* is scarcely a logical next step.

43. This is certainly the opinion evident in Krause 1971:§48 and Meid 1967:§20.

4. Nominal stem vowels in compositional syllables

above, the composition vowel is uniformly -a-.⁴⁴ However, even if such an assumption has convenience on its side, the evidence within urnordisch is scarcely copious enough to demonstrate it properly; but it will serve as a working model.

44. Perhaps the same also applies to the transition from KJ 27 Kragehul spear-shaft **ginu-** to KJ 97 Björketorp **gina-** if we assume this is due to morphological replacement; but as noted these forms are extremely difficult to evaluate.

5. NOMINAL LONG STEM VOWELS IN FINAL SYLLABLES

5.0. *Introduction*

This chapter attempts to isolate the long vowels attested in urnordisch unaccented syllables on a morphological basis and then try to match them up phonologically. As this section is so dependent upon morphological desinences, it follows that a lot of attention has to be paid to the extremely complicated etymologies of the Indo-European and Germanic inflectional endings. Therefore there are two distinct aims in sight, though both are related and of interest: firstly, to establish a synchronic model for the set of unaccented long vowels as we can reconstruct it from the evidence, and secondly, to relate this system diachronically to the picture we can glean from comparative evidence.

Before moving on to the attested evidence, a couple of brief comments are in order as to the nature of the long vowel system envisaged for urnordisch (though without, I hope, prejudicing the discussion below). Firstly, as noted earlier (§2.2.2) I will work on the assumption that the long vowel system in urnordisch (and proto-Germanic as well) had only one distinctive prosodic feature, ie. length, and no account will be taken of other properties often attributed such as inherited distinct intonation patterns or nasalisation. Secondly, it is notable that, unlike for the short vowels, the urnordisch stressed and unstressed long vowel systems are generally reconstructed as more closely equivalent. As will become clear below, I believe that any rigid methodological insistence that one long vowel in accented position is equivalent to another one and only one long vowel in unaccented position is something which must be discovered from the evidence, not merely assumed and then used as a working axiom; and the evidence does not permit such a conclusion.

5. Nominal long stem vowels in final syllables

The majority of these inflexional endings are only attested in a very small number of instances. This unfortunate accident of history naturally tends sometimes to render ineffective the policy of analysing morphemes in turn and examining how consistent their orthographic representation is. Nevertheless, there is always at least the possibility that something may be learnt from even such meagre evidence, so I will continue with the procedure of taking one ending at a time.

5.1. *The masculine a-stem substantival dat.sg.*

Probable instances of this ending are KJ 76 Opedal **wage**¹ and KJ 136 Tjurkō **walhakurne**.² On the other hand, it seems equally likely that KJ 97 Björketorp **weladaude** represents a weak nom.sg. rather than an *a*-stem masculine dat.sg. as assumed by Antonsen 120 (cf. §5.11.6), whilst the other attestations of this ending in post-syncope inscriptions are discussed below (§9.5.2).

The two attestations of KJ 72 Tune **woduride** are also taken by most commentators to be the dat.sg. of a personal name which in later Old Icelandic form would be **Óðrǫðr*.³ Of these, the second example (...)**R woduride** ... is syntactically isolated due to the loss of the runic sequence preceding it and so provides only circumstantial evidence, although to be fair a dative does fit in well with the clause following.⁴ Of more interest is

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1. For this name, cf. OE *Waga*, *Wægmund*, OHG *Vago*, and see Förstemann 1900:1487-88 and von Friesen 1924:103.
 2. Even though it is disputed whether this follows on from the preceding preposition *an* 'on' and represents some form of convoluted kenning for 'gold (bracteate)', as preferred by Krause, or is rather independent of the preposition and represents a personal name 'for Valkorn(i)', as argued by Grønvik 1987:§29, scholars have tended to agree on the morphological analysis.
 3. For this compound type with *a*-stem deverbative second elements, see above §3.1.3.
 4. According to the interpretation favoured in KJ:164-66. For a different view, which

5.1. The masculine *a*-stem substantival dat.sg.

the first instance, where we have to all appearances the earliest attestation of the ON preposition *apt*, *eptir* 'in memory of' in the form *after* with the name *woduride* following. Elsewhere in the runic tradition this preposition prefers to govern an accusative, as already in the elder futhark inscription KJ 98 Istaby *Afatr hariwulafa*.⁵ In related dialects, whilst the preposition *æfter* in Old English regularly governs a dative, some of the Northumbrian glosses take a following accusative, but even in this dialect the dative is more clearly attested in the northern memorial inscriptions, which may indicate that such a usage with the dative is an early feature, later replaced within the Norse tradition by the accusative.⁶ Moreover, the difference between the temporal function which appears in Old Norse to govern the accusative as opposed to the locative which prefers the dative can scarcely be considered an absolute distinction. Nevertheless, it could be argued that the two instances of *woduride* can provide only circumstantial evidence for the attestation of the *a*-stem dat.sg. Since it appears that *-e* is a normal spelling of this ending, the way is open to interpret them as datives, but there are no non-arbitrary grounds to identify them as such.

5.1.1. *The case for the diphthongs.* Rather more controversially we also find on the Möjbro stone the form KJ 99 *haha* or *hahai*. Despite the large number of interpretations which have been put forward for this inscription, it seems intuitively most obvious, given the accompanying picture, to follow the view espoused by Krause which takes the phrase *ana haha(i)* as

nevertheless still assumes a proper noun in the dative case, see Grønvik 1981:168-75.

5. See Krause 1971:§111,2, DR:741-43. The same feature can be seen in the earliest younger futhark inscriptions from outside Denmark such as ÖG 8, ÖG 136, SÖ 176; for the relative chronology showing these inscriptions to be early, see Johnsen 1968:91-99.
6. On this see Bosworth and Toller 1898:10-11 and Page 1958:149-52. The large semantic spread of ON *eptir* plus dative leads Grønvik 1981:146 to conclude that 'det tyder på at dativ her er gammel språkbruk og at akkusativ har trengt seg inn senere, fra rene tidsuttrykk'.

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'on a horse'.⁷ One objection which can be raised against this idea is that a proto-form **hāha-* 'swift one, (therefore) horse' cannot be justified, and that the claimed parallels in the first elements of various West Germanic compounded proper nouns are irrelevant.⁸ However, even though it is not completely secure, the recorded Rhenish name *Hanhavaldi* seems to supply a useful parallel,⁹ and in addition the Verner's Law voiceless variant alongside Germanic **hang-* seems to be confirmed by ON *hestr*.¹⁰ Although the positing of a theoretical root in such an urnordisch text is a justified enough procedure, it is methodologically more pleasing to avoid doing so whenever possible to avoid the uncritical use of, and reliance on, hypothetical asterisked forms throughout interpretations of the early inscriptions. However, the alternatives which have been proposed are no more satisfying. Elmevik's interpretation in particular relies too heavily on his dubious principle of 'inskrivna runor',¹¹ whilst taking *haha* for OI *hár* 'one-eyed', although formally impeccable, gives a less obvious sense to the

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7. See, for instance, Brate 1915, Marstrander 1952:258-70, KJ 99, Elmevik 1978a and Grønvik 1987:§30; the older literature is surveyed by Jansson in U 877. The translation of *ana hahai* as 'zu pferde' had already been suggested by Burg 1885:107 note 2, who had however no confidence in his idea.
 8. For instance, Elmevik 1978a:70-72 argues that the OHG names in *Hah-* etc. are more likely to be contracted forms of **Haga-* or similar first elements. However, to judge from his presentation at least, Kaufmann 1968:163 seems happy enough with the element **hāha-*.
 9. See Kraus 1890 no. 102, who is suspicious and prefers to emend to *Hathavaldi* even though the reading is clear. In fact, *Hanhavaldi* provides the only slight external indication that the form should be reconstructed as an *a*-stem, without which this evidence would have to be considered even more circumstantial.
 10. Which seems to be better derived from **hāhista-* than the **hangista-* attested in OE *hengest*. Firstly, it is by no means certain that a consonant cluster **-ngst-* coming together at syncope would simplify to *-st-*. Secondly, if we assume loss of the nasal before *-s-* in such environments, we might expect secondary lengthening of the vowel, cf. Noreen 1923:§299,4; however, this point is not particularly telling given that ON *hestr* appears to be shortened from **heistr* anyway, cf. Noreen 1904:§93,1, and that Old Swedish forms <hester>, presumably for *hēster*, are actually attested.
 11. As argued in 1978a:74-78; however, see above §4.4.

5.1. The masculine *a*-stem substantival dat.sg.

inscription as well as leaving **ana** stranded.¹² There is no self-evident alternative to an interpretation involving a root **hǣh-* 'swift, (therefore) horse' here; however, even if it is accepted as reliable, the exact word division still raises difficulties.

Although Krause and Antonsen 11 divide the sequence as ... **ana hahai slaginar** and so translate 'slain on a horse', a viable alternative is the division ... **ana haha is slaginar**, which would mean 'is slain ...' with the verbal auxiliary combining to form a passive construction.¹³ Although the representation of a phonological geminate by a single rune across a word boundary is not securely attested from the older runic period,¹⁴ this can scarcely be raised as a conclusive objection to the reading. We can reasonably suggest, however, that **haha(i)** should be analysed as a noun governed by the preceding preposition, in which case the dative would be the expected case. This seems the most plausible approach despite Grønvik's argument that **haha** must represent a weak nom.sg. form, which is based on his supposed parallel on the Ågedal bracteate inscription, an interpretation which does not seem secure enough to support such a position.¹⁵ The most natural conclusion is therefore that we are left with a choice between dat.sg. forms **hahai** and **haha**, with the former possibly slightly preferable.

12. As for instance von Friesen 1913:3 and Marstrander 1952:266-68, albeit with different views as to the role and case of **haha**. I find it a doubtful assumption that the ON name *Áni* should appear in the contracted form **ana** already in this text; for the etymology, see Blöndal Magnússon 1989:20-21.

13. This word division is that favoured, for instance, by Grønvik 1987:§30.5, although he argues for a different overall interpretation. A parallel for such a usage of the copula with a past participial formation can according to most authorities be found on the Vetteland stone in the phrase KJ 60 (...)flagdafaikinar ist

14. For a few uncertain instances, see Antonsen 1975b:§4.4.

15. 1987:§30.5.

5. Nominal long stem vowels in final syllables

5.1.2. *The etymological case.* If we assume the form **hahai** represents an *a*-stem dat.sg., then, all other things being equal, it would be natural to suggest this represented a diphthongal ending **hāhai*. The more common forms in *-e* could then represent a monophthongised stage **-ē*, and this fits well with the further development to ON *-i*. Etymologically, too, a diphthongal reflex would be conveniently explicable as the logical reflex of the IE loc.sg. ending **-oi* in this class of noun.¹⁶ There is naturally a relative chronology implicit here, since according to this scheme KJ 99 Möjbro **hahai** would be typologically older than KJ 72 Tune **woduride**, KJ 76 Opedal **wage** and KJ 136 Tjurkö **walhakurne**. Unfortunately, it is difficult to find any archaeological context with which to establish a non-arbitrary chronology for these texts. The consensus appears to be that nothing stands in the way of assuming a 5th century date for the artwork on the Möjbro stone, though it seems rather unclear how independent such a dating is of the runological opinion.¹⁷ Runologically there are no good grounds to oppose the dating of c. 300 AD proposed in Antonsen 11, and therefore no reason to doubt that a diphthong could be retained in the text, at least not on the basis of any relative chronology involving the other reflexes of the *a*-stem dat.sg.¹⁸

The evidence, slight and tentative as it is, therefore may indicate an early urnordisch dat.sg. ending in *-ai*, also represented by *-e*, presumably as the next step in a diachronic development, though as yet this remains an undemonstrable assumption. On the other hand, it may rather suggest two competing representations of this morpheme in *-e* and *-a* if the alternative

16. Szemerényi 1990 VII:§6.7.

17. KJ:224-25 reckon the closest parallels are with the Gotlandic picture stones from Martebo and Vallstena, both dated to the 5th century. On the other hand, although Jansson in SR 8:562 allows that the text and the picture 'ha för ristaren utgjort en enhet, med en gemensam mening', he indicates SR 8:573-75 that there is no firm way of pinning down a dating on the basis of the art-work, so anywhere in the range c. 300 to c. 500 seems to be possible.

18. On the dating of the inscription, see also below §5.4.

5.1. The masculine *a*-stem substantival dat.sg.

word division of **haha(i)** is preferred. Whether such fluctuation is to be seen as orthographic or morphological will be discussed later in the summary chapter (§9.2).

5.2. *The masculine a-stem adjectival nom.pl.*

The Tune stone (KJ 72) contains a form which has been read variously as **sijoster**, **(a)sijoster** or **arjoster**.¹⁹ All the proposals can have objections raised against them, most obviously Bugge's **sijoster** which is little more than an ad hoc reconstruction.²⁰ The most natural reading is probably **sijoster**, but Löffler's attempt to interpret such a form as an adjective 'related' from the root seen in Old Frisian *sia* 'kinsman' was comprehensively discussed and rejected by Marstrander.²¹ The more recent debate has centred on whether the rune at B3,7 should be read as **-r** or **-si**; although Grønvik objects to Krause's assumption of a *venderune* **-r**-here, much the same point can be raised against his own reading **-si**-, which similarly requires assuming an **-s**- uniquely oriented within the text. Nevertheless, the semantic and etymological difficulties with Krause's derivation of **arjoster** from the IE root **arya-* 'noble' are, as capably pointed out by Grønvik, too severe for it to be accepted.²² On the other hand, Grønvik's own favoured reading of **asijoster** as a derivative of the

19. See the research history in Grønvik 1981 chapter 4.

20. NlæR I:34.

21. Löffler 1892 and Marstrander 1930b:310-15, although his arguments against Löffler have a fairly hypothetical basis.

22. 1981:114-16.

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Germanic root **ans-* 'love' remains hypothetical, even though it is bolstered by his idea that KJ 17a Eikeland asni is from the same etymological root.²³

Despite the mystery surrounding the root of the form, all commentators have agreed that it represents a masculine nom.pl. adjective in the superlative degree, sometimes thought to be in apposition to **prijor dohtrix** but always governing the dependent gen.pl. **arbijano**. However, if the two phrases are in grammatical agreement, as seems most likely, then there is no reason to assume that **arbijano** is a masculine rather than the more intuitive feminine noun other than the fact that an adjectival form ending in **-oster** fits better with the later ON masculine nom.pl. **-ir** than it does with the fem. nom.pl. **-ar**, apparently already attested with a different shape in KJ 72 Tune **prijor** (§5.8, also §7.11). Therefore this evidence is rather more circular than is usually supposed. If, on the other hand, we take **asijoster** as feminine, then we have a distinction between **-or** and **-er** for the same ending which is rather difficult to explain. Nevertheless, it seems a risky procedure to extrapolate phonological information from a sequence which is not satisfactorily interpreted and where we cannot even be sure of the word division.

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23. Grønvik 1981:183. However, it seems equally possible that KJ 17a asni could correspond to Gothic *asneis*, OHG *asni* 'labourer', a form which has at least the virtue of being attested somewhere within Germanic, and which is also used as a proper name; see Searle 1897:236 for the occurrences of *Esne* within OE. The pre-emptive strike against such a proposal launched by Grønvik 1976:183-84 note 62 is inconclusive; the very OHG forms *aran* alongside *asni* that he quotes 1976:158 indicate that ON *qnn* from **az(a)nu-* does not rule out the possibility of an urnordisch agentive formation in **asnija-* with a different Verner's Law variant. His interpretation of Eikeland becomes more plausible if we place credence in the groom-to-bride scenario he adopts from Liestøl, see 1976:134,168-75, and certainly it has the virtue of explaining why the brooch turned up in a woman's grave; but neither this scene nor the conventional interpretation of *wiwio* is certain, see below §7.11. In addition, it unfortunately looks as though the sex of the grave's occupant does not necessarily give us an insight into the nature of the accompanying inscription since, for example, both KJ 9 Himlingeje 1 *hariso* and KJ 10 Himlingeje 2 *widuhudar* were discovered in women's graves but are normally interpreted as men's names, cf. below §5.11.4 and Grønvik 1987:§36.1.1.

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This presents a dilemma which is not easy to resolve, since in this work I have at times considered reliable data which is open to one or both of these charges. An apposite example would be from the Tune stone itself, KJ 72 dalidun, where the syntax and so the morphology are clear even though there is dispute as to the precise nature of the root syllable and meaning (see §8.6.2). Since the sequences of runes surrounding (a)sijoster seem fairly transparent as regards sense, it is valid to ask what alternatives there might be to reading a superlative adjective here. As might be expected in this field, viable options do seem to be available, although with rather limited plausibility. A form *ster* would be strongly reminiscent of OHG *stēn*, Old Swedish *stā*, *stær* ‘stand(s)’, which would be a pleasing form to identify in an inscription on formulaic grounds.²⁴ This would leave (a)sijo to be accounted for, which might be identified with ON *esja*, perhaps with the sense ‘the heirs’ stone will stand (here)’.²⁵ Alternatively, we could attempt to relate *sijo* to ON *sjá*, as in the spelling *prijor* for OI *prjár*, and translate ‘this will stand’. There is also a particle of obscure etymology which appears in pronominal forms such as SÖ 137 *sarsi*, U 188 *sasi* ‘this’²⁶ and also in extensions like DR 131 *hirsi* from ON *hér*. It is interesting to speculate that an independent adverb could be at the root of this with the sense ‘here’, and that this adverb were reflected in *sijo*.²⁷

24. Cf. the parallel instances, although usually with forms from the variant root *standa*, in DR 192, SÖ 122, Niy 2 and a goodly number of others.

25. Although the West Norse meaning of *esja* ‘soapstone’ does not fit ideally with the granite of the Tune stone, the sense of Old Swedish *æssia* and the Finnish loan *ahjo* ‘hearth’ can be compared to the use of KJ 71 *arina*, ON *arinn*, for the By stone.

26. From ON *sá*, cf. VG 61 *sa*, ÖG 162 *sar* and further instances in Peterson 1989:50-51.

27. For the possible connections with the Gothic interjection *sai* ‘behold!’ and further cognates, see Lehmann 1986:290.

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These proposals are not intended as serious attempts at interpreting the Tune inscription, which is why they are presented so sketchily. It is simply the intention to show the range of options open to us; despite a century of intensive attention, the root in KJ 72 (a)si/rjoster has defied reasonable analysis.²⁸ It is possible that had so much time been invested in any of the alternative routes noted here, scholars would have come up with other interpretations of at least equal plausibility, and that the -oster suffix would not have enjoyed its status as a securely identified morpheme for as long as it has.

5.2.1. *A North Germanic diagnostic feature?* Having said that, for the sake of argument I will put faith in our powers of reconstruction for the moment and work with the idea that -er is indeed a masculine nom.pl. adjectival ending as is usually assumed. In the debate over the language of the early runic inscriptions, Grønvik argued that such an ending in *-ēr was a diagnostically North Germanic feature since it was 'klart forskjellig' from the endings seen in OHG *blinte*, OE *blinde* and most obviously Gothic *blindai*.²⁹ As he observed, given the close correlation between the adjectival and pronominal declensions, we might expect that any addition of final *-r in the masc. nom.pl. would take place in both sets of endings, as it did in Old Norse *þeir*, *blindir*. Therefore, if a form in *-ēr is to be seen as common to both the North and West Germanic languages, it probably means assuming that the OHG pronominal masculine nom.pl. form *dē* shows loss of final *-z as does the adjectival flexion seen in *blinte*, which though not impossible would not be particularly favoured.³⁰ On balance it

28. Cf. the closing remarks 1984:15 of Høst's opposition to Grønvik 1981.

29. 1981:67-68; the same applies to the references below. For Grønvik's point that the affixation of *-r must be secondary within urnordisch, since an original sequence *-air would have yielded *-ār rather than *-ēr, see below §5.3.1.1.

30. OHG appears regularly to retain final -r from *-z in monosyllabic pronominal forms like the 1st and 2nd pers. dat.sg. *mir*, *dir*, the 2nd pers. nom.pl. *ir*, the 3rd pers. nom.sg. demonstrative *er* and the interrogative *hwer*. On the other hand, in

5.2. The masculine *a*-stem adjectival nom.pl.

seems probable, though not proven, that the addition of the final *-z in the pronominal and adjectival masculine nom.pl. was an innovation not shared by Northwest Germanic as a whole. However, since the usual view appears to be that common Northwest Germanic, possibly represented in the language of the early inscriptions, encompasses only the Scandinavian and Ingvaemonic dialects (see §2.1), the OHG evidence is perhaps irrelevant, in which case the whole question opens up again.

Nevertheless, for urnordisch at least, there is no doubt about the form of the ending in *-er*, assuming the basic interpretation is correct.

5.3. *The masculine and feminine i-stem gen.sg.*

The much-debated final line on the Årstad stone gives rise to the best-known instance of a possible *i*-stem gen.sg. form. KJ 58 read *uṡwīnar*, an older alternative being Bugge's reading *ḡiṡwīnar*,³¹ and although the initial part of the line still causes problems, a reading *...wīnar* seems fairly settled. Most recently, Gerd Høst has proposed a reading of *ek wīnar* as *ek *vinnr* 'I, the maker' with an *a*-stem agentive noun from the ON verb *vinna* (see §3.1). Although some questions remain as to the morphological likelihood of such a formation, it does fit nicely with the plausible reading of the initial part as *ek...* rather than the dubious *ṡ*-runes that have been proposed. Therefore, I do not believe this form can supply reliable evidence for the shape of the *i*-stem gen.sg. within urnordisch; instead 'we must fall back on theoretical arguments'.³²

plural forms loss of final *-z appears to be regular in the feminine nom. and acc.pl. numeral *zwa*, *zwo* and demonstrative article *deo*, *dio*, although this last form, if Gothic *þos* is assumed to represent the more archaic type, may have been reformed along the lines of ON **þaiðz*, cf. KJ 98 Istaby *þaiar*, and so we may just have regular loss in an unaccented syllable.

31. NIæR I:233-35.

32. Stiles 1984:11. As noted above (§3.7), the analysis in Antonsen 31 of KJ 65

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5.3.1. *Etymology vs. analogy.* On the basis of comparative evidence, the proto-Germanic *i*-stem gen.sg. ending can best be reconstructed as **-aiz*.³³ With no attested evidence to guide us, we must attempt to reconstruct the urnordisch ending on the basis of what we can deduce from elsewhere; however, as is well documented, here we appear to find a clash. A Germanic sequence **-aiz* yielding ON *-ar* does not conform to the regular monophthongisation of this diphthong to something approaching [æ] or [ē] and ending up as ON *-i*-. Earlier scholars therefore took the option of seeing the ON *-ar* ending as analogical from other classes, specifically from the *ō*-stems for the feminines and rather less obviously from the *u*-stems for the masculines.³⁴ With the passage of time, this recourse to analogy has been replaced by the idea of a direct phonological development from **-aiz* to urnordisch **-ār*, which has since become standard.³⁵ Since two basic different mechanisms appear to have been proposed for this monophthongisation, we will examine the validity of each one in turn.

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32. Nordhuglo *ungandir* as an *i*-stem gen.sg. is too uncertain too credit. A further possibility which on formal grounds would fit excellently with the arguments raised below would be to reinterpret the By inscription *ek irilar hrorar hrorer orte ...*, taking KJ 71 *hrorer* as a qualifier like some of those in the many *ek erilar ...* formulas and as representing an *i*-stem in the genitive. For competing stem-formations within Germanic along the lines of **Hrorar* and **Hrorir*, cf. OE *hrōr* 'active' with *hrēr* 'half-cooked', the latter presumably from **hrōzi(z)* and both from the root **hrō-* 'to stir, mix, (therefore) cook'; see Pokorny 1959:582. In this way *-er* would represent an ending **-ēz*, the expected late urnordisch reflex of Germanic **-aiz*. Although this is obviously fairly hypothetical, the more conventional approach of assuming *hrorer* to be a syncopated form from **hrōrijar* seems a bit wilful given that forms like *irilar* and *hrorar* retain their stem vowels intact.
33. As seen, for instance, in Gothic *anstais*. It seems uncertain whether there is any necessity to posit a different inherited ablaut grade in Germanic **-iz* from IE **-eis* to account for OE *ēste*, OS *ansti* and OHG *ensti*, as assumed by d'Alquen 1988:§11.6.1 (c) and Krahe 1967:§15, or whether they should be considered as innovations specific to West Germanic, as preferred by Grønvik 1981:63-64 and also, though with a different and less plausible model, Campbell 1959:§605.
34. For example, van Helten 1903:542.
35. As in Jóhannesson 1923:§132, Krause 1971:§59,3 and Grønvik 1981:63.

5.3. The masculine and feminine *i*-stem gen.sg.

5.3.1.1. *A phonological monophthongisation.* The most common notion is that an original Germanic sequence **-aiz* developed to urnordisch **-ār* whereas in other environments the diphthong generally monophthongised to **-ē*.³⁶ Therefore, the apparent counter-example in the ON masculine nom.pl. adjectival ending *-ir* from earlier **-air* is deemed irrelevant, since as we have seen above (§5.2.1) the affixation of this final **-r* may well be a specifically Nordic innovation subsequent to monophthongisation. Other exceptions must in their turn be accounted for by analogy. The ON 2nd pers.sg. present subjunctive *-ir* for expected ***ar* from Germanic **-aiz* (cf. Gothic *bairais* vs. ON *berir*) must be put down to extension of the theme vowel from the rest of the paradigm.³⁷ A further instance is provided by the development of the class III weak verbs in Norse, as illustrated by the 2nd pers.sg. present indicative *vakir* alongside Gothic *wakais*, but here again, quite apart from the difficulties involved in pinning down the exact historical stem formation of these verbs in **-ai-*, the argument for paradigm analogy would be equally persuasive.

Nevertheless, although there are indeed models for these analogical restructurings, they cannot hide the the basic difficulty, which remains the ad hoc formulation of the development **-air* > **-ār*. Firstly, it is posited to account for one morphological ending only, despite the fact that all other environments available to test it portray a different picture. Secondly, it is a feature of the sound law that only the sequence **-air* is affected, and so it is not even a general development, say, in closed syllables **-aiC*; therefore the plural forms of the present subjunctive *berim*, *berid̥*, *beri* are all considered to have developed regularly from **-aim*, **-aið*, **-ain*. Thirdly, the parallel of the other low-high urnordisch diphthong **au* fails to give any support to a special monophthongisation to a low vowel before

36. Stiles 1984:10.

37. While it seems possible that a 2nd pers.sg. form ***berar* could have been maintained along the lines of the 1st pers.sg. *bera*, the closer correlation between the 2nd and 3rd pers.sg. endings elsewhere in the verbal paradigm can probably be assumed responsible.

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*-*r*, as can be seen from KJ 60 Vetteland *magor* with what appears to be monophthongisation to *-*ō*- (see §5.4). Although this last point may seem to be merely a marginal facet of diphthong typology, in some other monophthongisations *-*ai* and *-*au* seem to develop in similar directions and in much the same chronological timescale.³⁸ No monophthongisation of the sequence *-*air*- is known from accented syllables either, cf. ON *geirr* < **gairar*.

Whilst none of these factors has a direct bearing, there seem to be enough of them to gain an oblique hold on the problem. If nothing else, it can be shown that a posited phonological development of *-*air* to *-*ār* is both ad hoc and typologically unique, and as such has little to recommend it on formal grounds. Although it may be that scholars will continue to accept it as the lesser of various evils, this should not be allowed to disguise the fact that as a theoretical device it is flawed.

5.3.1.2. *Secondary accent*. An alternative mechanism, effectively an emended variant of the first, is summed up by Brøndum-Nielsen, who suggests that the *o*-grade ending in Germanic *-*aiz* ‘i det mindste efter kort Stavelse kan antages at faa Udviklingen *ai* > *ǣ* [...], saa at Endelsen i Nordisk bliver -*ǣr*, -*ar*’.³⁹ According to this view, half-stress in the position after a short syllable seems to be held responsible, since it is conventionally only in such environments that a monophthongisation of *-*ai*- to *-*ā*- can be shown to have taken place elsewhere.⁴⁰ However, this has the signs of a later specifically Nordic development, not one which

38. As in the later developments to **ē*, **ō* respectively before final *-*h* devoiced from earlier *-*g*, cf. ON *sté*, *fló*. The results before original *-*h*- may have been parallel with both diphthongs developing to *-*ā*-, but the position is very unclear; see Elmevik 1980. These are of course only attested in accented position, where, on the other hand, only for *-*ai* is there evidence for primary monophthongisation to **a* before *-*r*-; see Noreen 1923:§54,2.

39. 1950-73 III:§454,4. His apparent parallels such as *saghat* < **sagaidat(a)* quoted in I:§120,1 are equally likely to be from earlier **sagēdat*.

40. For example, in *Óláfr* from **Anulaibar*, see Noreen 1923:§54,3.

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must presumably have operated at the very beginning of the urnordisch period. In addition, it seems far from certain that secondary stress could be the deciding factor, and even if it has some relevance, the obvious mechanism to appeal to would be an accentual distinction between inflectional syllables, where only the development of **ai*, **ē* to ON *i* is clearly attested, and medial formative syllables, where **ai* and **ē* both sometimes give reflexes in *a*.⁴¹ Deprived of external support, this theory involves much the same difficulties as those pointed out above.

5.3.2. *The case for analogy.* Given the weaknesses of the proposed phonological developments, it seems worthwhile looking to check whether anything can be salvaged from the old theory that the ON *i*-stem gen.sg. -*ar* was analogically extended from the paradigms of other stem classes. After all, on the face of it, it does not appear a likely proposition that *u*- and *ō*-stem gen.sg. endings should suddenly go marching into the formally quite distinct *i*-stem declension. It requires motivation.

5.3.2.1. *Traces of a different gen.sg. ending.* Although a couple of traces of the expected *i*-stem gen.sg. ending in ON -*ir* through **-ēr* from **-aiz* have been identified, neither of them amount to much. It has often been suggested that Old Icelandic *vetterges* represents the original form of the ending fossilised in this compound, whilst some have seen remnants of an older *i*-stem underlying the ON *jō*-stem *elfr* 'river' in the gen.sg. in the element *Alfer-* found (alongside *Alfar-*) in Norwegian place-names.⁴²

41. Commonly quoted forms showing this lowering to -*a*- are ON *vitadr*, *Ólafr*, *naðarr* and Old Norwegian *ærfaði* alongside OI *erfiði*. However, as noted by Elmevik 1978b:5-10, it seems more natural to assume that monophthongisation struck due to loss of secondary accent rather than because of its presence, and he argues strongly that much of this evidence shows morphological restructuring rather than phonological development, see 1978b:71-83.

42. For example, Noreen 1923:§390,2 Anm. 1 although Brøndum-Nielsen 1950-73 III:§454,4 also notes the possibility that these forms might represent a different Germanic ablaut grade in **-eiz*. The form *vettergess* is recorded in the Old Icelandic Stockholm homily book, see Larsson 1891:372, and so is very early within the

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However, the evidence for this second point in particular is extremely limited, and both forms could easily be interpreted as having developed from older **-ar-*,⁴³ so our direct evidence once again proves insufficient. There is no relic **-ir* ending clearly demonstrable; instead the *-ar* form is dominant in the attested dialects.

5.3.2.2. *The merger of the feminine $\bar{o}$ - and *i*-stems.* Therefore only theoretical arguments can help to resolve the matter: it needs to be demonstrated not only how any putative analogical replacement may have worked, but also that it is likely to have happened at all. And the obvious case for analogical restructuring is indeed unconvincing, especially for those masculine nouns which have a gen.sg. in *-ar*.

Nevertheless, as a starting point it seems probable that the mechanics of the merger of the feminine $\bar{o}$ - and *i*-stem classes in Old Norse are of the greatest importance. On the one hand, Bibire claimed explicitly that the *i*-stem gen.sg. in *-ar* was the $\bar{o}$ -stem ending borrowed, and suggested that ‘the extensive reformation of *i*-stem feminine nouns is probably best considered as morphological dissimilation from the masculines’.⁴⁴ However, in his comprehensive study Wessén had already proposed instead that the phonological coalescence in the gen.sg. was one of the factors which had pulled the two classes together.⁴⁵

manuscript tradition. Although Wisén 1872:78 note 4 claims the form ‘*bör má hānda upplōsas “vettegess”*’, I can see no reason for doubting the expansion to *vettergess*; in the facsimile folio 36v l. 30 the abbreviation is clear enough.

43. See Rygh 1900:306. The only attestation of *Alfer-* before the 15th century appears to be an instance of the *herred* name *Elverum*, namely a *Alueræimi* DN V no. 190 (1346); Rygh reckons on original *Alfar-* here. Following Heusler 1931:§217a Anm., Bjorvand 1927:214 suggests slightly improbably that *vettergis* shows *i*-umlaut in positions of secondary stress as, for example, in *gefendr*.

44. 1975:§3 (2).

45. 1927:101-02.

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A sort of compromise position was adopted by Bjorvand, who argued that the adoption of *i*-stem endings by the feminine *ō*-stems was due to a desire formally to differentiate them from the masculine *a*- and *n*-stems, both of which declensions were characterised by the nom.pl. ending *-ar*.⁴⁶ By quoting much data from modern dialects of Scandinavia, he attempted to show that *-ar* came to be seen as a specifically masculine marker as opposed to *-ir* which was levelled as a feminine ending, and therefore found it 'nämlich ganz unannehmbar, dass die mask. und die fem. *i*-Stämme unter diesen Umständen unterschiedslos einen neuen Genitiv auf *-ar* erhalten haben sollten. Die mask. *i*-Stämme haben dagegen, um den formalen Unterschied noch weiter zu verdeutlichen, häufig das G. *-s* der mask. *a*-Stämme angenommen, z.B. *gests*, *sulls*.'⁴⁷ Following Bjorvand, Stiles also reckoned it was inconceivable that the gen.sg. in *-ar* could be a late analogical adoption common to masculine and feminine *i*-stems.⁴⁸

Although Bjorvand makes an interesting case, three points can be raised against his position. Firstly, the replacement of a putative gen.sg. ***ir* by *-ar* does not take place 'unter diesen Umständen' but rather 'unter anderen Umständen' because of the time differential. Whereas Bjorvand dealt with medieval data and later, it does not follow that there were equivalent moves to dissimilate gender during the late urnordisch period. While it may well be the case that some modern Norwegian and Swedish dialects have levelled *-ar* as a masculine ending as opposed to the feminine *-ir*, there are no signs of such a rigid split even in the medieval period.⁴⁹ Secondly, nor is the adoption of *-ar* 'unterschiedslos', precisely for the reason Bjorvand gives, that masculine nouns tend to adopt *-s* rather than the *-ar* favoured by

46. 1972:206-10.

47. 1972:214.

48. 1984:10-12.

49. There are, for instance, no indications that the nom.pl. *-ir* ending in the masculine *i*- and *u*-stems was felt to be awkward.

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the feminines. Finally, I would argue that there are good reasons for a putative *i*-stem flexion as a whole to drop the gen.sg. ending ***-ir* and replace it with something else, as I will attempt to show below.

Therefore, according to these proposed models two aspects may have contributed to the merger of the feminine *ō*- and *i*-stems. Firstly, the *i*-stems adopted *ō*-stem singular endings to disassociate themselves from the masculine *i*-stems, and secondly the *ō*-stems took on *i*-stem plural endings to differentiate themselves from the masculine *a*- and *n*-stem nom.pl. ending in *-ar*. Under such a scheme, I see no difficulties with the feminine *i*-stems adopting the *ō*-stem gen.sg. in *-ar*, regardless of what the masculines were doing. After all, there was presumably no inherited formal gender distinction in this desinence which could have been maintained instead.⁵⁰ However, some further motivation than these models can supply seems desirable to explain the extensive coalescence of the two inflectional classes. In particular, I feel that some additional first step is required before we can posit a widespread adoption of the *i*-stem nom./acc.pl. endings by the *ō*-stems simply on functional grounds. If we consider the merger to have taken place in late urnordisch, then the paradigms, at least in the singular, run along parallel but wholly separate lines;⁵¹ where then is the model for confusion between the *i*-, *ō*- and possibly also *u*-stems as the preliminary to these functional considerations?

50. There is an interesting analogue to this question in the form of the Gothic *i*-stem gen.pl. *-ē* which is also common to both genders, whereas elsewhere it is mostly a distinctively *a*-stem, i.e. masculine and neuter, ending; and this despite the fact that the Gothic *i*-stem declension clearly shows an incipient move to differentiate feminines and masculines. In a similar fashion to those who argue for an urnordisch monophthongisation of **-air* to **-ār*, this led Kortlandt 1978:291-92 to suggest that the Gothic ending *-ē* had to be phonologically regular within the *i*-stems, since it was inconceivable that both masculine and feminine nouns should have innovated analogically in the same fashion. However, difficulties of similar magnitude with his proposed development of IE **-ejom* to Gothic *-ē* were pointed out by Jasanoff 1983:188. More plausible seems to be the view proposed by Hollifield 1980:28, who prefers to assume an alternative vowel grade in **-eom*.

51. As reconstructed by Wessén 1927:95.

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There is a strong trend for original feminine *i*-stem nouns to end up as *u*-stems in West Norse and so become by default masculines.⁵² Despite Wessén's disclaimer that 'att här skulle föreligga en ursprunglig olikhet i stambildningen, *tu*-stammar vid sidan av *ti*-stammar, synes föga rimligt att antaga', it is notable how heavily the evidence is biased: every one of his examples of *i*- vs. *u*-stem confusion fits into this word-formational category.⁵³ It seems more likely that the confusion of stem classes as attested in OI *máttir* from an original *i*-stem **mahti-* was triggered off by the presence of two morphologically identical but formally distinct suffixes in *-ti-* and *-tu-*.

To test how such reasoning might apply to the confusion between the *ǫ*- and *i*-stems, a good starting point would appear to be the feminine abstract nouns in **-iðu* from Germanic **-iþǫ*. Assuming that this suffix could fluctuate with regard to stem formation helps to explain the regular presence of *i*-umlaut and absence of *u*-umlaut in such formations as *-semd*, *útlegð*, *fæð*, which can be derived from original *i*-stem formations in **-iþi-*.⁵⁴ The same case could perhaps be made out for the **-ni/-nǫ* suffixes. Although only *ni*-stems are conventionally reconstructed for Norse, this appears to be on the basis of the Gothic evidence, where the suffix generally follows the *i*-stem flexion. But there are clear signs that this regularity is due to standardisation within Gothic and should not be

52. Bjorvand 1972:211 argued that the retention of the nom.sg. ending *-r* led to the re-analysis of forms like *máttir* as masculine. However, this fails to explain the widespread confusion between the *i*- and *u*-stems, since it seems more likely that a masculine *i*-stem noun ***mættir* declining along the lines of *gestr* would have been the result according to Bjorvand's argument.

53. 1927:102,107-11.

54. Cf. Torp 1909:§27,4 II, Kluge 1886:§§120-32, and the efforts made by Tamm 1877 to establish criteria for distinguishing between the two formations.

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extended back to proto-Germanic.⁵⁵ Therefore it is quite possible that the variation seen, for instance, in *vǫrn* vs. *njósn* vs. *heyrn* is due to confusion of earlier **-nu* and **-ni* forms.

Although these suffixes were quite productive, it is not to be supposed that they were so dominant either in number or frequency of usage to force the various feminine declensions together. Instead, they could merely provide a model whereby the feminine *i*-stems could differentiate themselves from the masculines. However, examples like the Old Swedish feminine *i*-stems *fynd*, *styld* alongside OI *fundr*, *stuldr* show that differentiation of masculine and feminine *i*-stems remained a theoretical possibility, not an established regularity, and that not all feminine *i*-stems participated. Many original *i*-stems chose to resolve the dilemma not by reinforcing the distinction, i.e. by adopting *ǫ*-stem endings, but rather by eliminating it; that is to say, they retained their *i*-stem flexion and freely fluctuated between the two genders. In addition, it is of great relevance when Wessén notes that long-rooted masculine nouns which decline in the gen.sg. like *staðr*, *staðar* are not in fact original *i*-stems.⁵⁶ It is clear from the data that this class has a very mixed ethnic origin and is full of earlier *u*-stems and feminine *i*-stems. And it seems likely that these newcomers brought the gen.sg. ending *-ar* with them, which is why it appears in forms like *fundr*, *fundar*, whereas original long-rooted *i*-stems adopt the *a*-stem ending seen in *gests*.⁵⁷

5.3.2.3. *The triumph of the new gen.sg. ending.* All that remains is to demonstrate how and why original short-rooted masculine *i*-stems like *staðr* should have preferred the new *i*-stem gen.sg. ending in *-ar* to the inherited

55. Cf. Torp 1909:§24. Wright 1954:§200 notes that many of these formations show a mixed declension pattern in Gothic comprising elements both of the *ǫ*- and *i*-stem flexions. Elsewhere in Germanic *nǫ*-stems are not infrequent, cf. Meid 1967:§94,1b.

56. 1927:99.

57. In similar fashion the sporadic masculine *i*-stem dat.sg. ending *-i* is probably to be seen as that proper to either the *u*- or *a*-stems; cf. Noreen 1923:§388,2.

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*****-ir***. It is notable that those original short-rooted *i*-stems which end up with a gen.sg. ending *-ar* mostly lack *i*-umlaut, at least outside Old Gutnish. Since we would expect umlaut to be present in nom./acc.pl. forms like *staðir*, *staði*, it seems plausible that this levelling away of mutation took place on the basis of the root vowel in the singular paradigm.⁵⁸ Given this, if we assume an urnordisch gen.sg. ending in **-aiz* > **-ēr*, then the expected reflex along the lines of *****staðir*** would have been anomalous within this system, in that it would have been the only singular form which was ambiguous and confusing with regard to the question of *i*-umlaut. In the putative paradigm there would have existed a gen.sg. *****staðir*** alongside a nom.pl. *****steðir***. Under such circumstances, the gen.sg. would have wrecked the pattern of uniformity in the singular cases and could not have given a clear lead to the plural forms which umlaut variant to follow, since it would have been just as viable to judge from surface forms for the gen.sg. to adopt an umlauted vowel. Therefore an alternative was sought. Not only were there numerous new masculine *i*-stems developing, such as *burðr*, with a gen.sg. in *-ar*, but also the *u*-stems offered an ending in *-ar*, and it is striking how many older *u*-stems there are in the masculine *i*-stem declension, especially in Old Swedish such as *fridher*, *dødher* etc., which had probably shifted class as part of the general *i*- vs. *u*-stem confusion described above. Since the masculine and feminine *i*-stems were now clearly differentiated due to the feminine adoption of *ō*-stem singular endings, there was no hindrance to the class of short-roots like *staðr*, *burr* taking the new gen.sg. in *-ar*.⁵⁹

58. I disregard the gen. and dat.pl. for this purpose, since the ON endings *-a* and *-um* do not appear to be the direct reflexes of etymological **-ið* and **-imz*, and we cannot determine when the original forms were analogically replaced.

59. The faint signs in Old Gutnish suggest that here too a gen.sg. in *-ar* can be assumed for the *i*-stems, which is less easy to explain in these terms given that *i*-umlaut seems to have developed phonologically throughout the paradigm in that dialect; cf. Pipping 1905-07:xciii and below §7.6.4. Either it must be assumed that in this respect Old Gutnish simply followed the traits evident in neighbouring dialects, or that the widespread influx of *u*-stem nouns into the class had a particularly great effect.

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5.3.3. *The war of the genders resolved.* The intricate history of the feminine substantive classes is, as has been more than amply demonstrated by this discussion, a very tangled web indeed. Hopefully sufficient threads have been meticulously picked apart rather than just slashed with the sharp blade of ignorance to render the conclusions reached above valid. As I noted at the beginning, the problem with assuming a phonological development *-aiz to *-ā_R is not that it can be shown not to have happened; in fact, an open mind must regard it as moderately plausible. The difficulty is in the yawning gap which unfortunately lies between theory and reality; and with so few strands of evidence stretching across this gap, as a theory it is not convincing, at least not while there are other options open.

It was necessary to discuss this important ending, even if only on a theoretical basis, since it alone gives grounds for positing an urnordisch unaccented unit /ā/.⁶⁰ However, I believe that there was a gap in the system at this point, and that only with reference to this gap can we explain several other facets of runic orthography (cf. §9.2). The internal evidence suggests that an *i*-stem gen.sg. reconstruction in urnordisch *-ē_R is the most plausible, and there is little which stands in its way.

5.4. *The masculine u-stem genitive sg.*

The only attestation of this ending in the older runic period appears to be KJ 60 Vetteland **magor** 'of the son'. Although this part of the inscription is severely damaged, with only the top extremities of the staves visible due to fragmentation of the stone, the form has become generally accepted.⁶¹ If

60. As does Stiles 1984:12 and note 14.

61. KJ:137 reckon that 'von Z. II sind nur die Kopfpartien der Runen erkennbar, während die Fußteile weggeschlagen sind. Jedoch sind alle Runen eindeutig zu identifizieren', following the reconstruction in Marstrander 1945:19.

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we take it as correctly read and interpreted along with the consensus, then **-or** is the only attested form for this ending.

Comparative evidence appears to demand a proto-Germanic diphthong for this ending in **-auz*, cf. the Gothic gen.sg. *sunaus*, and it is possible that this reconstruction is supported also by the length of the final syllable in OHG *fridoo*.⁶² If so, then the most natural interpretation of KJ 60 **magor** would be that it represents a monophthongised stage **-ōr* on the way to ON *-ar*. The question then raises itself as to whether we should look for a parallel development of the urnordisch diphthongs **/au/* and **/ai/* in unstressed syllables, for if so this form would be considered typologically younger than the diphthong possibly attested in KJ 99 Möjbro **haha(i)** (see §5.1.2). Unfortunately, the Vettelund stone is scarcely datable on any archaeological basis, although placing the inscription in roughly the middle of the 4th century is fairly uncontroversial.⁶³ Although this date is a century earlier than the placing of the Möjbro stone in KJ, and therefore would not fit in easily with a relative chronology if we were to assume that the two diphthongs followed a similar course,⁶⁴ the reasons for believing in the relative difference of antiquity are unconvincing. Firstly, there is the evidence of the form KJ 60 Vettelund **faihido** 'painted', which is paralleled on KJ 63 Einang and (apparently) retains a diphthong in the root syllable before following **-h-*; while this might give an indication on which to base a relative chronology as regards monophthongised forms such as KJ 73 Rö **fahido**, it is irrelevant to the question of the Möjbro inscription. On the other hand, there is the tricky question of the palaeography of the early runic inscriptions, and the typological relationships between the various

62. Attested by gemination in the Alemannic Benedictine rule, see Braune~Eggers 1987:§220c Anm. 3. However, a single instance cannot be considered too reliable. Both Mensel 1902:33 and following him van Helten 1903:514 suggest the possibility that this form is a scribal error.

63. See KJ:139, Antonsen 18.

64. An idea that, while maybe pleasing and economical, remains merely an assumption, of course; see below §5.5 for the divergent development of the diphthong **-iu*.

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rune forms. On KJ 60 Vetteland we find the s-rune with the form ξ , i.e. a *dreieckig* form as opposed to the simpler *zweieckig* s-rune ζ on KJ 99 Möjbro. On grounds such as these Krause makes important chronological distinctions throughout his corpus, but as argued above (§1.2.1.2.) they should be treated with caution. At any event the *zweieckig* form also appears on the Tune stone which is usually acknowledged to be part of the earliest Scandinavian rune-stone tradition, and this feature can unfortunately tell us nothing. Since no archaeological hold can be gained on the problem, no chronology can be set up between Möjbro and Vetteland.

5.5. *The masculine u-stem dative sg.*

The only secure instance of this ending, at least as regards interpretation for sense and case, appears to be KJ 136 Tjurkö **kunimudiu**, although definitive proof that the element *-mundr* should be reconstructed as a *u*-stem is difficult to find. Name-forms like Ostrogothic *Gesimundus* can scarcely be used as supporting evidence, since it is plain that *-us* is the Latin nom.sg. ending extended to all Germanic stem types.⁶⁵ The usual recourse is to the fact that ON nouns in *-mundr* have a frequent gen.sg. ending in *-ar* as opposed to the *a*-stem ending *-s*, which is often a sign of transference from a different declension,⁶⁶ and the runic evidence bears this out for East and West Norse alike.⁶⁷ It seems reasonable therefore to take

65. Cf. the list in Köbler 1989:680-707.

66. Noreen 1923:§358,2. However, this is not always the case, cf. *-móðr*, gen.sg. *-móðar* where all the signs point to an original *a*-stem as in Gothic *mōps*, *mōdis*.

67. As in DR 58 **kuþmutar sun**, U 1011 **sial uihmuntar**, Nyr 494 **sikmuntar son**, SM 145 **gunmundæ sun** (dotted dental *n*-runes). The apparent nom.pl. form ÖG 136 Rök **kunmuntar fim birnar sunir** 'five Gunn-/Kynmundr's, sons of Björn', is certainly a marginal if not simply nonce-formation; it cannot therefore, as assumed by Düwel 1975:150, be used as an indication that the element *-mundr* was prone to shifting between the *a*- and *u*-stem declensions. On the other hand, I have been able to find no runic instances of the dat.sg. of this element, and the manuscript

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this as a *u*-stem dative.

The other two examples often cited are less reliable. In DR 357 it is suggested that the form KJ 96 Stentoften **(m)A(gi)u** should be interpreted as the precursor of ON *mogr*, dat. *megi*, but this is more of a suppletion than a reading.⁶⁸ Despite many sterling efforts to make something of line IV of the Stentoften inscription this part of the text defies secure interpretation, not least because so little of it can be read with certainty.⁶⁹ It therefore seems too risky to assume with, for instance, Antonsen 119, firstly that as much of the text as **mag.u** can be made out, and secondly that we can segment the sequence into **mag(i)u** ... plus the rest when the following runes are uninterpreted. If a dat.sg. of *mogr* is insisted upon (which is unjustified in itself), then a form **magi** for ON *megi* would appear to fit in better with an inscription which shows considerable signs of being post-syncope. This attestation can therefore be left alone.

The second possibility is the form KJ 24 **asau** on the Vimose buckle. Much attention has been paid to this inscription, in particular because according to some interpretations it appears to be written in an East Germanic dialect. Marstrander seems first to have interpreted the final sequence as **asau wija** 'I hallow to the god', although he did not find a single analysis that fit the runes preceding quite so neatly.⁷⁰ In the absence of a credible explanation for the whole inscription **aadagas(u) laasauwija** it is not easy to have faith in this reading and division of the final sequence, especially since it might be intuitively preferable, though scarcely necessary, to assume a word division which corresponded to the break where the text flips over to the other half of the clasp. Alternatives have been proposed to this end, as for instance Antonsen 99, but his view that

attestations do not (as far as I am aware) confirm any *u*-stem dat.sg. in **-myndi*.

68. And is rightly eschewed by KJ:211.

69. See von Friesen 1916:49-50, Grønvik 1987:§23.3.

70. 1952:63-72; as noted below §7.1, it is difficult to pick out any one of the many interpretations posited for the inscription as being particularly plausible.

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the inscription represents a West Germanic dialect has no real support.⁷¹ Even if we read final *-gast* for more usual *-gasu* there is nothing to suggest loss of the stem vowel **-i-* was a feature of West Germanic by the beginning of the 3rd century, and some evidence against it. Likewise his interpretation of *-auwija* is difficult to accept, not only because West Germanic gemination of **-w-* before **-j-* as presented in the handbooks is a rather dubious development, but also because a form **-auwija* with a syllabic Sievers' Law reflex is not what would be expected anyway.⁷² The safest conclusion would still appear to be that of Jacobsen and Moltke, who noted that 'runerne blev [...] først opdaget 1868 af Engelhardt.—Siden har indskriften været genstand for mange forskellige tolkningsforsøg, uden at noget endegyldigt resultat kan siges at være nået'.⁷³

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71. 1987:23-24; for *-gast* and the *alawin, alawid* pair, he claims that 'the loss of the stem-formant in these original *i*-stems is the result of the influence of the consonant-stems, which is evident in all the Germanic languages' and refers to himself 1969-70:66-70. However, there is little such evidence even within West Germanic, and even if Antonsen's main contention is correct, his data seems to indicate a set of innovations specific to OHG. It strikes me that, despite his arguments, the traditional view whereby **-i(-)* is lost after a long syllable in OHG still has the edge.
72. Why should a syllabic reflex develop after gemination? Much the same applies to his argument that *niuwila* also exhibits West Germanic gemination, see 1975b:§5.5; but why geminate before an **-i-*? As for doubling of semi-vowels before **-j-*, the assumption, at least for original sequences **-awj-*, that this is a common West Germanic development is due to an over-reliance on OHG data, but presumably any West Germanic forms in such Scandinavian inscriptions are more likely to share features with the Ingvaenic dialects. As pointed out by Holthausen 1921:§168 Anm. and Dahl 1938:95-109 there is no reason to posit gemination in such instances as Old Saxon (gen.sg.) *hōgias*, Old English *htg*, *htges*. Instead they are to be seen as perfectly regular developments from **hawj-/hauj-*, and gemination as assumed by, for instance, Campbell 1959:§120,2 is purely a concession to OHG *hewi*, *houwes*. Admittedly, original sequences **-iwj-/iuj-* are more difficult to evaluate, but again Dahl's posited developments 1938:103-04 seem more plausible than assuming gemination before **j*.
73. DR:248. It should be noted also that the sequence KJ 67 Noleby *hakupo* is interpreted by Antonsen 46 as containing a *u*-stem dat.sg. with the same ending, although appearing in monophthongised form, as Marstrander envisaged for KJ 24 Vimose buckle *asau*; for some criticisms of this idea, see below §7.3.2.

5.5. The masculine *u*-stem dative sg.

5.5.1. *The comparative bit.* From a comparative and dialectal point of view the *u*-stem dat.sg. is notable in that, along with the *ō*-stem dat.sg. ending, it is a feature which appears to unite Gothic and Ingvaemonic against Old Norse and the Low and High German dialects. This is a fairly rare situation,⁷⁴ and it seems uncertain whether it is coincidental or an inherited distinction. To all appearances Gothic *sunau*, OS *suno*, OE *sunā* represent the reflexes of an original diphthong with a low first element, as opposed to the archaic OHG dative *sitiu*,⁷⁵ KJ 136 Tjurkö *kunimudiu* and ON *syni* which are better derived from a diphthong with a high front first element. Delving into the prehistory of this ending, unfortunately, quickly poses more problems than it solves. One approach is to assume a proto-Germanic form **-ēu* derived from an IE endingless locative and to argue that, whereas pre-Gothic lowered the first element to **-au*, in the West and North Germanic dialects raising took place to **-iu*.⁷⁶ Whilst the ad hoc nature of this posited development is obvious, it is a rather attractive notion phonologically, especially as the developments in the dat.sg. of the *i*-stem flexion seem to back up such a dialectal split.⁷⁷ However, despite the support of numerous authorities,⁷⁸ the legitimacy of positing such

74. H.F. Nielsen 1981:180-84 surveys other features showing just such a dialectal distribution and concludes that 'the parallels are few and generally insignificant', although he does not include the *u*-stem dat.sg. amongst them, see 1981:106.

75. Later analogically restructured to form the instrumental and replaced by a dative *site*, see Braune ~ Eggers 1987:§220c and Anm. 3.

76. As Streitberg 1896:§177,5.

77. So, if we are allowed to posit another original endingless locative for the *i*-stems in **-ēi*, the same split would account for the diphthong in Gothic *anstai* as opposed to the apparent reflexes of a Northwest Germanic **-i* in ON *brúð(i)*, OHG *ensti*, OE *ēste*. Unfortunately, the *i*-stem dat.sg. is not attested in the urnordisch inscriptions; the reading adopted by Antonsen 12 of KJ 58 Årstad *winai*(...), to be interpreted as the dat.sg. of the precursor of ON *vinr*, cannot really be supported. Inspection of the stone with the advice of James Knirk convinces me that the reading *-winar* is more likely to be correct, see above §5.3.

78. For instance, Brugmann 1897-1911 I:§231 and II.2:§§170-72, and Krahe 1967:§17.

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endless locatives for Germanic has come under some fire. Antonsen expressed doubt about the notion of proto-IE phonological developments along the lines of **-eji* > **-ēi* and **-ewi* > **-ēu*, suggesting that such views were ‘particularly farfetched’, and argued there was no reason not to assume that Germanic inherited straight from IE loc.sg. endings of the form **-ewi* for the *u*-stems and **-eji* for the *i*-stems, which is admittedly morphologically far more natural and transparent.⁷⁹ Whether or not it is justified to posit for IE, or at least some dialects, endless locatives with lengthened grade vowels is a matter which cannot be treated here.⁸⁰ On the other hand, whether it is reasonable to assume their reflexes for proto-Germanic depends very much on which way you wish to explain the pattern within the various dialects.

Either way the distribution remains curious and must be explained (away). One method is to assume paradigm analogy within Ingvaenic whereby the reflexes proper to the IE *o*-grade are thought to have extended themselves into the dat.sg.⁸¹ It is here that the problem is so involved that it seems unlikely a single definitive answer can be found. Neighbouring languages testify quite convincingly to the fact that the IE *o*-grade insinuated itself throughout the *u*-stem paradigm whereas the *e*-grade maintained its place in the *i*-stems. Assuming these two classes were once morphologically parallel, this would seem to indicate a common north-west

79. 1969-70:75.

80. Szemerényi 1990 VII:§5.3 presents the idea that IE had originally a loc.sg. ending **-ow-i* (or **-ew-i* with full *e*-grade, possibly by analogy with the *i*-stems) which was later absorbed to **-ōu* (or **-ēu*) before the dialects broke up.

81. This is favoured by, for instance, Streitberg 1896:§177,5, Prokosch 1939:§83,3 and Walde 1900:57, albeit assuming analogy to have operated at different times. This would also help to explain why specifically OE and Old Frisian show apparent reflexes of an *o*-grade diphthong **-au* in the *u*-stem dat.sg. where the combined authority of the other evidence points to an *e*-grade diphthong giving Germanic **-iu*. Although Old Saxon retains no gen.sg. ending proper to the *u*-stems to provide a model for such an analogical extension, it is not crucial to the argument either when this extension took place or when the gen.sg. ending was replaced by *-ies*, although presumably they must have happened in this chronological order.

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IE tendency to substitute the sequence **-ow-* for **-ew-*, possibly due partly to a form of phonetic assimilation. Thus we find the dat.sg. appearing in Gaulish as *-oou*, in Umbrian as *-uv-e*, and similarly for the nom.pl. as in Gaulish *-oues* and Old Slavonic *-ove* as opposed to the IE *e*-grade in Gothic *-jus*, Greek *-εις*.⁸² All the mechanisms, such as assimilation and morphological levelling of the stem vowel, are therefore in place to account for the widely divergent reflexes within the various Germanic languages.

5.5.2. *Conclusions — of a sort.* It seems neither profitable nor necessary to delve any further into the historical background of the *u*-stem dat.sg. ending. Suffice to say that, whether we posit an endingless loc.sg. in **-ēu* (or for some dialects **-ōu*), or, as I am inclined to agree with Antonsen is preferable, a form **-ewi* with the full grade of the stem plus the locative morpheme *{-i}*,⁸³ we can, supported by the evidence of KJ 136 Tjurkö **kunimudiū** and the uniform later reflex of ON *-i*, validly posit an urnordisch diphthong **-iu* for this ending. If, for the sake of argument, we should provisionally accept the form KJ 24 Vimose buckle **asau** as the legitimate dat.sg. of the precursor of ON *áss* as Marstrander argued, it seems plausible that this could represent either an East, or perhaps even Ingvaemonic West, Germanic variant. On the other hand, it could equally well be taken as belonging to a Scandinavian dialect which, as regards this one ending, sat on the wrong side of the isogloss and did not survive to leave a reflex in the later records. Certainly it is not obvious to see how the two forms could represent any vacillation due to the uncertain mapping of sound to rune; it seems more likely that they would indicate morphemes of a different phonological shape. But since, as I have noted, the form **asau** is unreliable anyway, we are left with a single attested ending of the form *-iu*.

82. Thurneysen 1946:§§311-12 and for the Slavic Kortlandt 1983:178 as against Vondrák 1924:110.

83. See Mayrhofer 1986:§7.2.

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5.6. *The feminine $\bar{o}$ -stem adjectival acc.sg.*

Scholars have frequently interpreted the form KJ 67 Noleby **raginakudo** as an acc.sg. adjective in apposition to **runo**. Although arguments are produced below (§5.9) to the effect that it is preferable to analyse both as acc.pl. endings, this remains a viable analysis and supplies a form of the ending which it would be useful to check against some more reliably identified evidence. According to Grønvik, KJ 67 **hakupo** is another example of the ending,⁸⁴ and certainly his idea that it represents an $\bar{o}$ -stem acc.sg. of a theoretical ON *****hákunnr** ‘noble’ fits well on formal grounds. However, the rune forms immediately preceding this sequence are extremely obscure and it is difficult to accept Grønvik’s interpretation of the text as a whole.⁸⁵ Therefore this can unfortunately only supply circumstantial evidence for the form of the feminine acc.sg. ending, since it has no secure syntactic context. Finally, as noted below (§6.1) it is also possible that KJ 50 Strøm **hino** should be analysed as a feminine acc.sg. adjective rather than a masculine as is conventional. If any of these are taken as reliable, then they combine to suggest an ending spelt **-o**, which agrees well with the Germanic reconstruction in ***-ōn** and with the later Old Norse reflex **-a**.

84. 1987, see §19.2.6 and §19.3.4.

85. On runological grounds, his suppletion in §19.3.8.1 of **-a:-** at B18 does not seem particularly likely; cf. KJ:149 ‘II: R.18 [...] Deutlich sind zwei senkrechte Stäbe, zwischen denen Spuren von Verbindungslinien erkennbar sind.’ It seems a bit strained to attempt to read a complete ‘senkrechten Stab’ as a division mark to judge from the analogy of the others on the stone. His reconstruction of a noun to fit **suhur** in §19.3.6.1 also has more the feel of ingenuity than conviction; cf. the similar objections raised below (§7.3.2) to his treatment of KJ 67 **unapou**. Whether the inscription as Grønvik reads it should raise any eyebrows from the point of view of its semantic content is impossible to determine; as noted above (§1.2.1), this lack of knowing what to expect is without doubt the greatest drawback in interpreting the early inscriptions.

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5.7. *The feminine δ -stem substantival dat.sg.*

This desinence appears to be attested in at least one and possibly several elder futhark post-syncope inscriptions, and since it shows no signs of apocope there despite (apparently) having always been unprotected by a final consonant, the indications are that the vowel constituting the ending was long. The only urnordisch form which must be accounted for is KJ 71 By **alaifu** which has frequently been understood as the dat.sg. of a name **Anulaibu*, the precursor of ON *Ólof*. Even from a linguistic viewpoint such a form must be considered suspect. The inscription generally preserves stem vowels intact, yet this analysis of **alaifu** assumes both syncope of the compositional syllable and loss of **-n-* in the first element; these do not fit well with any conceptions of an urnordisch text, especially given that there is no evidence for syncope of **-u-* after a short syllable until well into the Viking age proper.⁸⁶ Runologically too, there are good grounds for dismissing this form, in that it cannot be read on the stone. The edges are so frayed away that nothing can be made out at this point, least of all the tortuous bind-rune proposed by Bugge.⁸⁷ We are therefore left with the forms KJ 96 Stentofen and KJ 97 Björketorp **arageu**, if it is assumed with Antonsen 119 that these are dat.sg. forms of a feminine $j\delta$ -stem rather than a weak $j\delta n$ -stem (cf. §7.11), and KJ 101 Eggja **solu**. The **-u** spelling fits as well as might be hoped with the ON ending **-u**, but due to the late date of these texts is not necessarily indicative of the urnordisch quality of the vowel.

86. For example, the forms DR 190 **sunu**, **kupumut** show no signs of syncope, although it is uncertain whether the medial vowel in **kupumut** represents an original **-u-*.

87. NIæR I:107-08,198.

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In the attested ON dialects as they appear in medieval manuscripts the *-u* reflex in the feminine dat.sg. is only infrequently preserved. However, as noted by Noreen,⁸⁸ the dat.sg. ending in *-u* is in fact maintained throughout the Viking age in runic inscriptions, and rather more than 'bisweilen' as well. The data in Peterson's word-list to the Viking age Swedish inscriptions shows how frequently the dat.sg. *-u* ending is attested; it is recorded in both instances of *braut*,⁸⁹ all three instances of *far*,⁹⁰ in each attested example of *mark*,⁹¹ *valrauf*,⁹² *viking*,⁹³ and *strand*,⁹⁴ and in the clear majority of forms of *s(i)āl*, *sēl*,⁹⁵ but is absent only in the single instance of *færð* (of uncertain reading and case)⁹⁶ and regularly in dative

88. 1904:§399,3.

89. SÖ 34 *brauiu* and U 838 *brautu*, Peterson 1989:6.

90. I.e. OI *fqr*, so SÖ 108, VS 22 and VS 27 *faru*, Peterson 1989:14. To these may be added GO 134 *utfaru* for OI *útfqr*.

91. So SÖ 11 *marhu*, Peterson 1989:33, if this interpretation is preferred to the rather less plausible alternative offered by Brate in SR 3. However, ON *mark* with the meaning 'landmark, (therefore) memorial' appears to be a specifically neuter noun, see Söderwall 1884-1918 II:23.

92. ÖG 136 *ualraubu*, Peterson 1989:71.

93. VG 61 *uikiku*, Peterson 1989:73.

94. I.e. OI *strqnd*, so OG 136 *strontu*, Peterson 1989:61.

95. I.e. OI *sāl*, e.g. SÖ 134 *selu* but ÖL 12 {7} *sal*, see Peterson 1989:49. Despite Peterson's caution and the OI weak variant *sāla*, it seems likely that some of these at least may fairly safely be taken as specifically *ō*-stem dat.sg. forms given the large number of attestations, especially as there is no clear evidence for a weak variant in the medieval East Norse dialects. The gen.sg. form quoted by Peterson is in fact more likely to be the first element of a compound U 347 *sialubotar* and so does not prove weak inflexion, cf. Noreen 1904:§399,2 Anm. 5; likewise U 996 *siluaus* for *sēlahūs*. On the other hand, the two acc.sg. forms in U 327 and U 345 both follow the preposition *furix*, and so it seems quite possible that they are in fact in the dative case as in the inscriptions GO 21, GO 152 and the dubiously interpreted U 102.

96. I.e. OI *ferð*, so SM 48 *farþ*, Peterson 1989:16. No syntactic context is preserved for this form to judge its case reliably.

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forms of *and*.⁹⁷ Much the same picture can be seen from the Viking age Danish and Norwegian inscriptions as well.⁹⁸ The loss of the ending must be seen not as a reflex of urnordisch syncope but as a morph- cum phonological elimination in the late Viking age.⁹⁹ However, for current purposes we can reckon on a long final vowel in urnordisch.

5.7.1. *Making up an ending.* Having no recorded urnordisch form of the ending means an even larger gap than usual in the logical chain between etymological reconstruction and attested forms, and therefore only comparative arguments are available to determine the most reasonable shape of the ending for the urnordisch period. Similarly to the *u*-stems, the δ -stem dat.sg. shows a surprising distribution from the point of view of Germanic dialect geography in that Gothic and Ingvaemonic (minus Old Saxon this time) appear to side together against Old Norse and the continental German dialects. The fact of this split seems indisputable; what is at issue is whether the divergence is phonological in origin or

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97. I.e. OI *qnd*, for the examples see Peterson 1989:2. There seem to be no obvious features which mark off the two inscriptions containing clearly attested forms with an ending, SÖ 11 *antu* and U 627 *otu*, from the rest.
98. See DR:752. For Norway, cf. Niy 239 *tonmarku*, Niy 579 *muntlauku*, Kirk Michael 2 *salu*, although in medieval inscriptions endingless dat.sg. forms such as Niy 369 *sal* also appear. In names the ending *-u* is very frequent and even spreads to the acc.sg., see Noreen 1923:§377 and Peterson 1981:§4.3.1, §6.1.
99. And so may show instead secondary syncope as in OI *talið* > *tald*. It seems quite plausible that this loss was due to assimilation between the δ -stem dat.sg. in *-u* and the endingless feminine *i*-stem dat.sg. Both the runic endingless datives in ON *ferð* and *qnd* are probably old *i*-stems with the abstract suffix *-ti-*, cf. Torp 1909:§28,2, whereas all the original δ -stems have retained the marked dat.sg. ending. Although Bjorvand 1972:195 notes that old consonant and *i*-stems also appear with the *-u* ending, he also believes that the dat.sg. ending in *-u* 'urspr. nur den δ -Stämmen eigen war'. All the data in the inscriptions, as well as that quoted by Noreen 1923:§376, 1904:§399,3 and Brøndum-Nielsen 1950-73 III:§446,3 suggests that *-u* is the dat.sg. ending proper to etymological δ -stems. If so, this might also explain why the ending is preserved so regularly in certain inflexional types, most notably the *-ing(u)* suffix, since these fairly self-contained subgroups had no opportunity to be confused with original *i*-stems in ***-ingi*.

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morphological. Many scholars, probably the majority, have preferred to assume the latter and reckoned that the ON and OHG/OS *-u* forms were derived from an older IE instr.sg. giving Germanic **-ō*.¹⁰⁰ However, according to the normal rules of final syllables, such an ending should have vanished leaving only the legacy of *u*-umlaut in Old Norse, whereas it seems certain that loss of the dat.sg. ending *-u* cannot be ascribed to the general syncope which wiped out the urnordisch stem vowels. Krause's argument that 'das Ausharren dieser Endung ist wohl eben durch ihre distinkte Relevanz gegenüber dem N.Sg. zu erklären' is no sort of explanation.¹⁰¹ In the first place, the diachronic trend is clearly to eliminate rather than restore the ending, whilst there seem to be no grounds on which to assume the urnordisch feminine dat.sg. ending **-u* was too important to lose but, for example, the neuter nom./acc.pl. ending in **-u* was not. Despite his appeal to chronology, the ideas of van Helten are open to similar objections.¹⁰² Likewise, Grønvik's notion of 'en sterk biaksent' on final **-u* in trisyllabic forms as attested in OE *rtcu* from **rtkiju* founders on the fact that exactly this example shows that in this respect Old English syncope differed from Old Norse, cf. OE *rtki*.¹⁰³ It seems clear from the data quoted above that retention of the *ō*-stem dat.sg. ending in *-u* is the rule rather than the abnormality to be explained away.

If we assume then that *-u* is the etymological dat.sg. ending proper to *ō*-stems, then the most natural approach is to assume also that it is historically identical to the Gothic *ō*-stem dat.sg. *-ai*, as argued by

100. As for example Streitberg 1896:§174 Sg.,4.

101. 1971:§58,2.

102. 1910:455. Van Helten suggested that at the stage when final vowels had only been apocoped after long syllables, the analogy of the retained dat.sg. **-u* of the short-rooted *ō*-stems led to the maintenance of the ending after long roots, and that analogical preservation then worked in the opposite direction when the time came to apocope final vowels after short syllables.

103. 1985b:172-73.

5.7. The feminine δ -stem substantival dat.sg.

Hesselman.¹⁰⁴ An interesting mechanism for such a split was proposed by Antonsen who claimed that OHG raised the first element of the original diphthong $*-\delta i$ before a high vowel to $*-\bar{u}(i)$, so giving the feminine dat.sg. ending in $-u$.¹⁰⁵ Although arguing for such raising in a sequence like $*-\delta-i$ may be thought to be more algebraic than convincing, such a phonological development can be identified in equivalent environments for OHG and Old Norse but not for Gothic or Ingvaemonic, which exactly matches the attested dialectal variation (see §7.11.3). The way is therefore open to suggest that an urnordisch dat.sg. ending in $*-\bar{u}$ could have developed by exactly the same means. On the other hand, it might rather be suspected that the pronominal ending in ON *þeiri*, cf. Goth *þizai* but OHG *deru*, represents the regular reflex of IE $*-\bar{a}i$ with shortening to Germanic $*-ai$ as would conventionally be expected. A case could perhaps be made out that in the feminine substantive declension the stem vowel $*-\delta-$ was maintained unshortened into Germanic in this sequence $*-\delta i$ (for expected $*-oi > *-ai$) in an effort to avoid stem apophony.¹⁰⁶ This seems a more plausible approach than the more traditional, rather unlikely, course, which was to posit for Northwest Germanic an inherited feminine dat.sg. ending in $*-\bar{u}$, since there is no reasonable basis for such a form.¹⁰⁷ The three dative

104. Hesselman 1913:60-64, followed by, amongst others, Wessén 1927:95 footnote 2.

105. 1969-70:74-75. Although Antonsen himself rejected the idea, it might be possible to tie this in with the equivalent dialectal split in the u -stem dat.sg., see above §5.5.1, if we assume that Gothic (along possibly with Ingvaemonic) regularly lowered the first elements of original final long diphthongs.

106. Since, for example, the dative marker $*-i$ would be clear from other stem classes, as t -stem $*-eji$, u -stem $*-ewi$ compared to nom.pl. $*-ejez$, $*-ewez$ etc. Likewise the masculine a -stems would give a clear lead in this regard with nom.sg. $*-oz > *-az$, dat.sg. $*-oi > *-ai$. Therefore, on the analogy of nom.sg. $*-\delta$, acc.sg. $*-\delta m$ etc., the δ -stem dat.sg. ending might be artificially preserved/restored as $*-\delta i$ and avoid shortening. That this did not happen in the pronominal flexion, at least not according to ON evidence, can be attributed to the fact that the cohesion of stem-classes was less clear there, even more so given the extension of medial $*(a)iz-$ in the feminine gen. and dat.sg. endings.

107. See Noreen 1923:§373 Anm. 3. Finding older theories based on differences in

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endings of the *u*-, *ō*- and less comfortably *i*-stems then dovetail into a single phonological pattern within the Germanic languages.¹⁰⁸

The combined picture then suggests that in urnordisch the form of the *ō*-stem dat.sg. was **-ū*, which presumably would have been written **-u*.

5.8. The feminine *ō*-stem nom.pl.

The adjectival form KJ 72 Tune **prijor** provides our sole evidence for this ending, and the form itself within the context of the inscription is as sure as anything in the corpus of elder futhark inscriptions can be. Etymologically a comparison of related languages, most explicitly Gothic *gibos*, leads to the usually posited reconstruction in **-ōz*, although elsewhere the picture is not quite so clear due to the West Germanic confusion between the original nom. and acc.pl. endings (§5.9.1). However, both in Gothic and in the later attested stages of Old Norse these desinences are formally identical and the difficulties in pinning down single

accentuation inadequate, Walde 1900:72-88 argued for a masc./neut. instr.sg. ending in Germanic **-ū* from IE **-ōu*; however, the Slavic evidence he used as support is of dubious relevance, since most authorities believe the Slavic *o*-stem dat.sg. *-u* is to be derived from the thematic dat.sg. in **-ōi*, see Jasanoff 1983:144-45 and Kortlandt 1983:175. In addition, he is forced to propose a development of this diphthong to *-ū* using Gothic *ahtau*, *ahtādin* as a parallel, but as pointed out by Szemerényi 1960:88-89 such a monophthongisation is not to be assumed for the ordinal. And the final step of extension from the neut. *-u* to the fem. in ON is implausible to say the least.

108. Admittedly disrupted slightly by the Old Saxon evidence, but the merging of Ingvaenic and Istvaeonic features in that dialect is well known. For the *i*- and *u*-stems, I refer to the discussion above (§5.5.1). As I envisage it, the Norse dat.sg. endings of **-ī*, **-iu* and **-ū* respectively are the regular phonological developments of the posited proto-Germanic forms **-eji*, **-ewi*, **-ōi*. The Anglo-Frisian dialects have probably levelled the stem vowel to create a dat.sg. **-au* in the *u*-stems; for the *ō*-stem dat.sg. in **-ai* I would refer either to early Germanic shortening or to the fact that raising of **-ō* before high vowels is still a bit of a mystery in these dialects, see again below §7.11.3. Whether the Gothic *i*- and *u*-stem dat.sg. endings *-ai* and *-au* are likewise analogical, or derive from endingless locative forms in **-ēi* and **-ēu*, seems uncertain.

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reflexes in West Germanic may well reflect moves towards a similar coalescence. Nevertheless, this is clear evidence in all directions for a reconstruction **-ōr*, supported by the urnordisch ending in *-OR*.

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To all appearances this class is represented nine times, unfortunately almost all instances of the same word, but which can hopefully be assumed to be representative enough. The attestations fall into three distinct classes. Firstly, we have KJ 136 Tjurkö **runor**, KJ 96 Stentofen **-ronor**,¹⁰⁹ KJ 70 Järsberg **runor**, and probably also KJ 17a Eikeland **runo(r)**. (according to the conventional word-division of the bind-rune here). These reflect what was mentioned above (§5.8) about the nom. and acc.pl. forms being formally the same, and they correspond ideally to the ending in Gothic *runos*.

Secondly, there is the group consisting of KJ 97 Björketorp **-runar** and KJ 98 Istaby **runar**, **þaiar**; both occur in the transitional Blekinge inscriptions where signs of syncope are visible, and as such do not give unambiguous testimony to the urnordisch character of the ending. Instead they are more likely to represent the stage reached in ON *rúnar*.

Finally, there are the two forms KJ 63 Einang **runo** and KJ 67 Noleby **runo**,¹¹⁰ and it is this third set which is anomalous compared to the endings in Gothic *runos*, ON *rúnar*. The general trend recently has been to

109. Why the root vowel in this form should be written <o> for **/ū/* I have no clear idea, although dittography might be invoked. The proposed orthographic parallel in the spelling **-borumr** for **-būrum* as in, for example, Krause 1971 no. 91 is, I believe, based on a faulty interpretation of this latter form. Although this might tend to cast doubt on the reliability of **-ronor**, it still seems likely that the word 'rune' is the one intended here, and so the anomaly might simply be ascribed to the notoriously idiosyncratic spelling of the Stentofen inscription.

110. And according to Antonsen 53 also KJ 17a Eikeland **runo**. However, as pointed out by Høst 1977:154, little trust can be placed in Antonsen's variant interpretation as a whole.

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regard these as singular accusatives used in a collective sense.¹¹¹ Grønvik suggests that the form **runo** is a *singulare tantum* and should be translated ‘hemmelig formular (av magisk-religiøst innhold)’, which he claims is the original sense that later became generalised to more profane writings. However, this conception is founded on the belief that ON *rún* and Gothic *runa*, and presumably the West Germanic cognates as well, are historically the same word, a traditional assumption which has been rendered less self-evident by the thrust of much research. According to some scholars it is inconceivable that a Germanic word **rūnō-* with the sense ‘secret’ should have been used to describe a system of writing which was designed specifically for the purpose of communication,¹¹² a claim which is indicative of the general move to divorce the runic tradition away from notions of magic or the religious sphere to a more practical, mundane world of trade and memorial runestones. Further, for current purposes it is the great value of Fell’s study on the semantics of ‘rune’ that it demonstrates the incorrectness of the traditional translation ‘secret’. Instead, she points out that it is only applicable to translate OE *rūn* as ‘mystery’ in the theological sense corresponding to Greek *μυστήριον*, and that in any other context it is more appropriately rendered ‘knowledge or wisdom passed by discourse’, therefore ‘counsel’.¹¹³ It is apparent that this scheme applies to Gothic as much as to Old English, as exemplified by the use of *runa* to gloss Greek *βουλή, συμβούλιον* ‘plan, council/counsel’.¹¹⁴

To judge from the available comparative material it certainly looks as though the use of **rūnō-* for a written sign is secondary within, or perhaps simply specific to, Norse, and the way is clearly open to identify two different etymological roots collapsing in what has usually been thought of

111. Thus Krause 1971 no. 19, Antonsen 20 and most explicitly Grønvik 1987:§19.2.6 and §19.5.1.

112. As, for instance, Moltke 1985:77.

113. Fell 1991:197-99,205-16.

114. Köbler 1989:443.

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as common Germanic **rūnō-*. Morris put forward a fairly plausible argument that, far from being related to Latin *rūmor* etc., ON *rún* was from a root 'dig', and there are good parallels within related languages for just such an original sense of verbs meaning 'to write'.¹¹⁵ If this is accepted, then there is no reason to assume any meaning such as 'secret' attached either to ON *rún* or presumably urnordisch **runo(r)**. In fact, without accepting the rest of what Grønvik has to say about heathen mysticism, there are no grounds even in his vision for assuming that **rūnō-* originally had a sense '(written) message' or the like which only later came to mean 'runic character'.¹¹⁶ As noted by Fell, there is no evidence attesting to a native sense of OE *rūn* approximating to anything to do with writing.¹¹⁷ It is of course perfectly possible that the writing sense is a secondary development within the Nordic dialects, or perhaps instead that ON *rún* is to be taken back to Morris's root **reu-* 'dig' and is so to be separated etymologically from the attestations within Gothic and OE. However, there seems little with which to argue the case securely either way, and therefore only internal evidence can tell us what semantic range urnordisch **runo(r)** had; and here the runic tradition as a whole clearly demonstrates that an inscription made up of runic characters was referred to in the plural form. Although Morris notes that modern Swedish *runa* can

115. 1985:347-48,352-56.

116. Note that it is no longer generally accepted that Finnish *runo* 'poem' comes from *rún* as assumed by, for instance, de Vries 1977:453. Rather, according to Krause 1969:96-97 and following him Juntune 1973:25 note 24, it is to be derived from ON **runa* 'row, series (of verses)', identified in KJ 97 Björketorp (oblique) **ronu** and NI *runa*, cf. ON *runi*. This is therefore no secure evidence for the sense of 'message' or any support for a singular usage of **runo(r)**.

117. 1991:198-99,209-16. The passage quoted by Morris 1985:350 from the Old English *Daniel* is suggestive, but, as Fell notes, although his inference that it refers to a written message 'is perfectly possible [...] it does not fit so well for most of the other Old English material'. In fact, the semantic range analysed by Fell covers this example without recourse to the physical act of writing, and it seems clear that, contrary to Morris's position, the shared semantic links are between Gothic and Old English, with Norse evidence left as the outsider.

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still mean 'epitaph' alongside simply 'rune',¹¹⁸ some more relevant evidence would be the original runestone tradition in Scandinavia. As I have noted, the majority of the urnordisch instances of **runor**, **runar** are clearly acc.pl. forms, as are all the reliable instances in the later Scandinavian runic traditions.¹¹⁹

All these points do not, of course, prove that urnordisch **rūnō-* meant simply 'a runic character' and nothing else. Nevertheless, despite their arguments neither Morris nor Grønvik is able to give a single case of any other comparable Scandinavian singular usage, nor any cogent reasons as to why we should want to read anything other than acc.pl. forms in the urnordisch examples, which given the tradition elsewhere seems logical.¹²⁰ The only reason for taking **runo** as a grammatically singular form, rather than a plural as the rest of the runic tradition demands, is the formal phonological analysis; but since this is fairly circular reasoning, it is worth

118. 1985:350.

119. For example, in the record from Sweden, alongside something like c. 130 clearly plural attestations, I have found just six instances of **run** looking like a singular form. However, four of these, U 181, U 462, U 1042 and *Fv.* 1976:107, occur in the signing-off formula of late Upplandic runesmiths, where abbreviation is a well known feature; for Øpir see Quak 1978:41, whilst on the three texts signed by Kjūli, who wrote U 1042, Wessén comments in SR 9:289 that 'gemensamt för de tre inskrifterna är en osäkerhet i ljudbeteckningen.' Of the other two, Pipping's reading of the lost GO 54 looks suspect at best, whilst SÖ 98 is taken by Brate in SR 3:70 as a 'förkortad ristning'; it is certainly not a standard memorial inscription, and is only fragmentarily preserved. In the face of the vast uniformity of the plural forms of the word in this position, this constitutes no real evidence for a usage in the singular.

120. The interpretation of the Noleby stone given by Antonsen 46 does in fact supply a reason for assuming that that particular instance of **runo** is in the singular, in that it appears to agree with the form **fahi** identified by him as the acc.sg. ending of an *i*-stem adjective. This demonstrates the long-standing problem with older runic studies, namely the ease and plausibility with which this sort of etymological suggestion can be made. There is little with which to oppose Antonsen's position other than the fact that such a word is not recorded anywhere else, whilst on the other hand a further reflex of the verb **faihian* 'to colour' has at least some parallels in other inscriptions and will be assumed more plausible here. But this choice is simply a working starting-point based on considerations of method, it is not really an argument.

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looking at alternatives. The older theory was that the **runo** forms represented an acc.pl. ending formally different to that seen in **runor**, and if we allow ourselves to be governed by our intuition rather than our phonological preconceptions, it would be preferable to be able to revert to this view.

5.9.1. *The schizophrenic ending.* Throughout the IE languages the acc.pl. of this class is characterised by a crisis of identity. The ending **-āns* which can be reconstructed for IE on morphological grounds, in that it consists of the stem vowel **-ā-* plus acc.pl. marker **-ns*, seems to have given no direct reflexes, and instead all the endings in the daughter languages can be traced back to original sequences **-ās* or **-ans*.¹²¹ The simplification of a possible original ending **-āns* may have been phonological in origin already within IE; however, the final **-ns* could be restored in the various branches at any time on the analogy of the other stem classes where the nom.pl. **-s* consistently contrasted with the acc.pl. **-ns*. Just such a distinction between an original Germanic nom.pl. ending **-ōz* as opposed to an acc.pl. in **-ōnz* has frequently been called into action to explain the disparate reflexes in these two endings in the West Germanic languages, although unfortunately it is difficult to establish with any certainty which reflexes are proper to the nominative and which to the accusative given the merging of the two cases.¹²² Such arbitrary reconstruction of, and selection between, two different endings in this fashion is admittedly bound to cause

121. Szemerényi 1990 VII:§7.1.

122. As in Campbell 1959:§586 for the OE nom.pl. *giefa* vs. acc.pl. *giefe* dichotomy. At least one OE dialect, early West-Saxon, appears to preserve signs of this distribution, later obscured everywhere; see the results drawn by Kern 1906, corrected and reinforced by Dahl 1938:124-34, from the data in Cosijn 1888 II:§§13-18 and §26, although Cosijn himself makes no distinction between the two endings in his presentation. The opposition between the OHG substantive nom./acc.pl. *-a/-ā* on the one hand and the pronominal endings in *-o* on the other is also traced by Hollifield 1980:39-45 back to levelling of the old nom. and acc. endings in different directions.

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some uneasiness, but when the situation is as intricate and complicated as it appears to be in the West Germanic dialects it seems likely that messy explanations are also in order.¹²³

5.9.2. *Internal analogy or historical reflex?* Given these parallels it seems possible to suggest that forms like **runo** may represent the original acc.pl. ending, being replaced by the nom.pl. form **runor** through the course of the urnordisch period. This was in fact the view of Jóhannesson;¹²⁴ it is however not easily tenable. Although throughout the feminine classes of ON a final *-r* appears in both nom. and acc.pl. endings, this must mostly be seen as a secondary extension, possibly in an attempt to reinforce gender differentiation,¹²⁵ and the model for such extension of the nom. into the acc. had to come from somewhere. A possible origin would be the consonantal stems as in nom./acc.pl. *tennr*, but it seems unlikely that such a minimal class could have had such a widesweeping effect. In addition this would not fit in with the notion of distinguishing the genders, since within this class the masculine nouns also had formally equivalent endings, i.e. ON nom./acc.pl. *fætr*. It seems far more likely that the model was the common identity of the nom. and acc.pl. endings in **-ōz* in the feminine

123. It should also be borne in mind that the choice exercised by the philologist between the nom. and the acc.pl. endings on these occasions is merely a matter of accounting for the confusion; it does not explain the data. For example, to explain OHG nominal *-a* vs. pronominal *-o*, or OE early West-Saxon *-a* vs. Vespasian Psalter dialect *-e*, as due to selection of different variants is not to explain the selection of the endings as we have them; it merely provides the raw material available to create the chaos. A reason why the confusion spread can be reasonably suggested, namely the syncretism of the nom. and acc.pl. endings in all the other nominal classes of West Germanic due to phonological loss of the final consonants; however, an account of how it spread, and why some dialects opted for one form and others for a different one, is scarcely to be had.

124. 1923:§130.

125. Cf. OI *gestir*, *gesti* alongside *brúðir*, *brúðir* in the *i*-stems, where Germanic probably declined masculine and feminine alike.

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δ -stems.¹²⁶

I find it implausible therefore that forms like **runo** could represent the original acc.pl. ending which was later replaced by the form proper to the nom.pl in **runor**. Instead I suspect that the analogical tinkering operated in the opposite direction, and that an acc.pl. **rūnð*, represented by **runo**, could be an analogical re-formation on the basis of the other stem classes before the nom.pl. in **-R* established itself in the acc., but one which did not catch on and survive into the later attested dialects. This view has the virtue of keeping the semantic and syntactic parallels with the vast majority of other inscriptions where *rún* clearly appears as an acc.pl., and also gives a plausible mechanism as to how an acc.pl. form like **runo** could arise within urnordisch.¹²⁷ This seems to be a more satisfying approach than the possible alternative of identifying two competing reflexes of the acc.pl. ending in the early inscriptions, one representing Germanic **-ōz*, the other Germanic **-ōnz*.

5.9.3. *Loss of final *-n in urnordisch.* Nevertheless, there is still a difficulty inherent in this train of thought. If it is argued that **runo** is a sporadic analogical creation on the basis of forms in other stem-classes, such as for example the *i*-stem acc.pl. ending **-i* < **-in(z)*, then it presupposes that the development of final Germanic **-nz* to urnordisch **-n(n)* to $\emptyset$ by loss of the final nasal had already occurred by the time of the inscriptions which contain our two reliable instances of **runo**. And this is a very debatable assumption indeed.

126. As noted also by Wessén 1927:78-79 and Bjorvand 1972:196 footnote 2.

127. This is a similar situation to that envisaged by Flasdieck 1930:64 who claimed that **runo** was from an ending **-ōnz* created analogically on the model of, say, the *a*-stem acc.pl. **-anz*, although in the proto-Germanic period. However, when he adopted 1930:56 from Brate 1886:198 the supporting point that this endless variant of the acc.pl. ending might also be attested in the many instances of the form **runa** found in later younger futhark inscriptions, especially common in texts by the late Upplandic runecarver Øpir, he was on thin ice. These forms are better seen as exhibiting Old Swedish loss of final **-R*, see Noreen 1904:§321,2b.

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The only examples of this loss in absolute finality in inscriptions which may be considered urnordisch are KJ 17a Eikeland **wiwio**¹²⁸ and KJ 95 Gummarp **staba þria**.¹²⁹ These are however far outnumbered by instances where final **-n* appears to be retained, in KJ 12 Gårdlösa **un-**, KJ 56 Veblungsnes **wiwillan**, KJ 61 Kalleby **þrawijan**, KJ 65 Nordhuglo **un-**, KJ 69 Rosseland **agilamudon**, KJ 72 Tune **-halaiban**, KJ 81 Stenstad **igijon**, KJ 83 Belland **keþan** and KJ 136 Tjurkö **an**. Admittedly these sources are of a fairly disparate nature. In KJ 12 and KJ 65 we can identify examples of the negative prefix **un-*; of these KJ 65 Nordhuglo **ungandir** at least seems to be interpreted fairly securely, whilst KJ 12 Gårdlösa **unwod-** may be plausibly reckoned to be a formation **un-wōð-* ‘un-mad, un-furious’, even though the final rune in the sequence looks corrupt (§3.14).¹³⁰ It seems likely that KJ 136 Tjurkö **an** represents a form of the preposition ON *á*, but this attestation may not necessarily indicate retention of original final **-n*, in that variants due to sentence accent can be detected, cf. KJ 99 Möjbro **ana**. The rest of the examples are probably oblique case forms of

128. Assuming this is correctly identified as a feminine *jōn*-stem formation from the name **Wiwar*, cf. Grønvik 1987:§11.2.2 as against below §7.11.

129. This inscription can only be considered as prior to syncope if the form KJ 95 **hāþuwolafa(...)** is taken at face value as preserving the final stem vowel. The recourse adopted by Antonsen 116 of emending to ***hāþuwolafa** is reckless given the unanimity of the drawings left to us and since, due to the possible loss of runes at the beginning of each line of the inscription, we have no way of determining what syntactic function the name is filling; see Moltke 1956-58 II:94-98 and KJ:207. KJ 95 **sate** as opposed to KJ 73 Rō **satido** may indicate that medial syncope has occurred here, but there are problems concerning the formation of this verb; see Noreen 1923:§513 and Anm. 1 and for OE Campbell 1959:§753,9 b:7.

130. The development of this prefix to later *ó-*, *ú-* indicates that loss of **-n* took place before any morpheme-final, not just word-final, juncture. Although Noreen 1923:§299,5 Anm. 5 prefers to assume that loss of **n* in the prefixes *ó-* ‘un-’ and *sí-* ‘ever-’ was extended analogically from certain phonotactic environments, the morpheme boundary formulation seems preferable; examples like *Gestumblindi*, if etymologised correctly, probably reflect the loss of a significant morpheme boundary within the compound.

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weak *n*-stems.¹³¹ Despite the varied nature of this evidence, and the fact that probably some instances are of original **-n* and others of earlier **-nr*, it will be assumed in the absence of any contrary indications that we are dealing with one uniform loss of pre-junctural **-n* in the later urnordisch period.

Is it then possible on grounds of relative chronology that KJ 63 Einang and KJ 67 Noleby can be dated sufficiently late to have already participated in this loss of final **-n*? For KJ 67 Noleby **runo** there seems to be no real difficulty, as all the runological and linguistic pointers, inconclusive as they may be on their own, give a combined probability that the inscription is very late in the corpus of urnordisch texts.¹³² From a chronological point of view, then, there is nothing to prevent our assuming that KJ 67 **runo** may represent an analogical reformation once the acc.pl. forms in other stem-classes had lost their final **-nz* cluster.¹³³

Rather more difficult is the form KJ 63 **runo** on the Einang stone. It is conventional to date the inscription to the second half of the fourth century, but the archaeological evidence is so circumstantial as to be virtually worthless.¹³⁴ Linguistically and runologically the inscription gives no sign of being anything other than strictly in the tradition of the earliest

131. Of these *n*-stems, only KJ 61 Kalleby **prawijan** and KJ 83 Belland **kepan** have no reasonably established syntactic context, see below §7.11 and §7.13.

132. See KJ:151.

133. Although one further possible cause for slight uneasiness appears within the inscription in that the form **runo** appears to be in agreement with the adjective **raginakudo** 'descended from the gods', which demands that the adjectival declension at the time had developed in the same fashion. However, if a dialect did innovate in the way I have suggested, there seems to be no reason why the feminine acc.pl. should not be affected as a whole.

134. Schetelig 1914:64-66 and KJ:144 argue that since some grave mounds in the neighbourhood have goods datable to this period, this may indicate that the mound on which the Einang stone stands, and the inscription on the stone, are of a similar age. But the rough dating of grave-goods found in the stone's environs scarcely provides a solid estimate; cf. the comments of Haavaldsen 1991:58 who believes evidence from neighbouring sites is of no use for the dating of the inscription.

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urnordisch texts, although only one feature positively points in that direction, the retention of the diphthong in **faihido**. However, when trying to establish a vague date for the loss of final **-n* against which to set the estimates for Einang, we run up against the difficulties of establishing a relative chronology. Taking purely as a starting point a date of around 400 for Einang, the chronology in KJ lists two relevant inscriptions as roughly contemporary, namely KJ 61 Kalleby with **prawijan** and KJ 72 Tune with **-halaiban**;¹³⁵ therefore these may be left out of consideration as being close enough to permit some degree of slack as regards the spread of the sound-change and its representation orthographically. Likewise KJ 136 Tjurkø **an** will be ignored since, as noted above, this preposition seems susceptible to variation according to sentence stress and so the recorded form **an** may represent the accented variant with no loss.¹³⁶

There are therefore five forms which according to the conventional relative chronology give evidence for retained final **-n* substantially later than the Einang inscription.

Firstly, KJ 56 Veblungsnes **wiwilan**. Although the reading with the final **-n** is not given in KJ,¹³⁷ it appears to be correct.¹³⁸ Krause makes no attempt to justify the statement that the text is from 'etwa Mitte des 6.Jh.s',¹³⁹ but piecing together comments from elsewhere, the rationale might well have been the presence of the bind-rune forming the sequence **ek** at the beginning of the inscription, which occurs elsewhere on the

135. KJ:314-15.

136. Especially if the proposal of Grønvik 1987:§29.1.1 is adopted that it is operating adverbially.

137. Leading on from Bugge in NIæR I:320-21.

138. See Moltke 1985:105, although the conventional references to the authority of Marstrander for this reading do not exactly inspire confidence given his observation 1953:19 that 'på de fotografier jeg har [...] syns det virkelig å være spor av en *n*-kvist'.

139. KJ:127.

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Bratsberg clasp (KJ 16)¹⁴⁰ and the By stone (KJ 71).¹⁴¹ However, there is no reason to assume that because the Veblungsnes inscription exhibits the same bind-rune, it should be placed chronologically between the other two examples; there is not really a single diagnostic feature in the inscription with which to work.

Secondly, there is KJ 65 Nordhuglo **un-** in **ungandir**. According to the account in KJ 'Sprach- und Runenformen weisen auf eine recht alte Zeit, wenn auch vielleicht — wegen der Form der *e*- und *j*-Rune — nicht in die älteste Periode. Am ehesten um 425'.¹⁴² The *e*-rune is of the form **M** but it does not seem likely much capital can be made out of this. The variant **Π** is mostly to be found on portable objects, cropping up only occasionally in the runestone tradition such as on KJ 76 Opedal, and it seems likely that this is one of the features which has led scholars to postulate that the runestone tradition is somewhat later than the earliest loose finds, when in reality it may simply be a matter of preferences in a different medium.¹⁴³ At any rate, other inscriptions traditionally considered early such as KJ 72 Tune also exhibit this **M**-shape, and it cannot be argued that Nordhuglo is likely to be later than Einang on this basis. The *j*-rune has an effectively full height **4**-shape and is possibly more revealing, but here again we run into the problem of not having an externally derived context into which to put the chronology of this rune-shape. After the ancient Øvre Stabu spearhead (KJ 31), the Norwegian runestone tradition tends in general to have effectively full height *j*-runes as in KJ 53 Kårstad (slightly curved),

140. Dated on stylistic grounds to around 500 by Jankuhn in KJ:44, though with rather greater precision by Egil Bakka to c. 475-485, see Grønvik 1987:§35.1.

141. Dated in KJ:162 to the latter half of the 6th century, but on linguistic grounds based on an interpretation which is rather difficult to swallow as it is presented there, see Grønvik 1981:218.

142. KJ:147.

143. Or perhaps a different region, the flat-topped *e*-runes being concentrated in Denmark; but this geographical distribution is equally possibly a fluke based on the fact that most of the early loose objects happen to have been found there.

5. Nominal long stem vowels in final syllables

KJ 64 Barmen and KJ 91 Tørvika A.¹⁴⁴ There is nevertheless no way to relate Nordhuglo to KJ 63 Einang without going through several independent steps,¹⁴⁵ and at each remove the link grows weaker. As noted, the text is dated in KJ to around 425 anyway, so even if the grounds are trusted there is still an acceptably small amount of leeway available between that and the provisional dating for Einang.

The third form KJ 69 Rosseland **agilamudon** is dated by Krause to 'etwa in das 5.Jh.'. ¹⁴⁶ The only basis on which to make a judgement about the relative age of this text appears to be the form of the e-rune in the initial sequence **ek** ..., which Krause reckons 'ist wohl eher **M** als **Π**' even though it is 'durch eine Absplitterung stark beschädigt.'¹⁴⁷ Antonsen 39, who also dates the inscription to some point in the 5th century, believes that the shape can certainly be made out as **M** since he reads the sequence **irilar** as **erilar** with just that form as the first part of a bind-rune. Without wishing to commit myself on this issue, the points raised above about the irrelevance of the shape of the e-rune hold good here as well.

Fourthly, KJ 81 Stenstad **igijon** is the only one of our inscriptions where there is the possibility of an external dating context, in that it was found in a burial mound along with various pieces of jewellery and metalwork which were dated by Schetelig 'in die Zeit um oder kurz nach 450'.¹⁴⁸ However, since the grave was located a fair bit deeper in the earth

144. Some of the occurrences of this rune on the Tune stone (KJ 72) may perhaps be interpreted as slightly less than full height, but the matter is difficult to judge due to the slightly ragged nature of the text.

145. By arguing, for instance, that the j-rune on KJ 65 Nordhuglo is parallel to, or perhaps typologically slightly later than, that seen on the Rø stone (KJ 73), and that therefore, since KJ 73 Rø **fahido** appears phonologically younger than KJ 63 Einang **fahido**, KJ 65 Nordhuglo must also be younger, and yet has retained final *-n.

146. KJ:156.

147. KJ:154.

148. KJ:187.

5.9. The feminine *ð*-stem acc.pl.

than the stone was, there is nothing to prove that this dating is relevant to the inscription.¹⁴⁹ From a runological point of view, the tightly linked *j*-rune echoes the forms found on bracteates, as in the futhark on KJ 2 Vadstena. Although this form may differ slightly from the average *j*-rune found in the Norwegian runestone tradition, it does not follow that it is a younger development, and in fact it seems improbable that it is different enough to make anything of.¹⁵⁰ It is unjustified to base a relative chronology on the notion that the rune-form attested on the Stenstad stone and those on the bracteates must necessarily be seen as part of a direct chronological progression from the straighter *j*-runes more commonly found on Norwegian runestones.

Finally, for KJ 83 Belland *keþan* Krause claims that 'die Form der *k*-Rune verweist die Inschrift von Belland in eine Zeit vor etwa 550. Wegen der gleichen Stilisierung wird man sie in ungefähr den gleichen Zeitabschnitt setzen wie den Stein von Saude, also um 500'.¹⁵¹ The 'gleiche Stilisierung' referred to is the elliptical practice of placing a name in the genitive, assumed to be that of the dead person, on a runestone (cf. §7.11), but to extrapolate from this that the two inscriptions are roughly contemporary is fairly desperate reasoning. No more convincing are the grounds given by Krause for dating the parallel Saude inscription itself, that 'die elliptische Ausdrucksweise deutet wohl in eine nicht allzu frühe Zeit,

149. Schetelig 1914:67-71 points out that there may be no direct connection between inscription and grave-goods, a point which is reinforced by Haavaldsen 1991:58-59. According to her guidelines established by Jan Eriksson, a mound excavated non-professionally in 1781 should not be treated seriously at all in any case. Likewise Bæksted 1952:82 suggests that the stone may have been used secondarily to build the mound.

150. See above §1.2.1.2 on the problems with the *j*-rune. Already von Friesen 1924:28 had sensibly commented on the distinction drawn by Lindquist 1923:87-90 between, for instance, the *j*-runes on the Skåång and Stenstad stones that 'det är utan vidare klart att dessa hårfina distinktioner icke ha något med runtypens verkliga utveckling att göra.'

151. KJ:189.

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also etwa in die Zeit um oder bald nach 500'.¹⁵²

This case convincingly echoes the claim that 'it cannot be over-emphasized that the dating of every inscription is, in the last analysis, hardly more than an educated guess.'¹⁵³ It is possible that the general weight of probability regarding any relative chronological scheme still favours the notion that the Einang inscription is somewhat older than some of those texts where final *-n appears to be maintained. Nevertheless, it remains a very lightweight probability given the enormous difficulties inherent in gaining even the slightest insight into the age of some of the inscriptions discussed above. It must remain for the individual reader to gauge whether any gain is made by overturning this slight statistical edge and positing an analogically formed acc.pl. in *-ō for KJ 63 Einang **runo** and KJ 67 Noleby **runo ... raginakudo**.

5.9.4. ... *and finally*. To sum up, I will note that whatever option is taken on the question of the endless forms in -o, the forms discussed here give clear and unambiguous evidence for a stem vowel represented consistently by <o>, which fits in well with the reconstruction of this feminine class as Germanic *ō*-stems.¹⁵⁴

5.10. *The feminine *ō*-stem gen.pl.*

There are unfortunately no urnordisch examples of this ending, but the interpretation of KJ 97 Björketorp -**runo ronu** as 'sequence of runes' seems reasonably plausible despite the apparent corruption evident between this

152. KJ:188.

153. Antonsen 1975b:11.

154. For the sake both of caution and completeness, the forms **runo** are noted also in the section on the feminine acc.sg. ending, see above §5.6.

5.10. The feminine δ -stem gen.pl.

and the parallel text KJ 96 Stentoften which has **runono**. While it may perhaps be unjustified to try continually to shed light on the one text by comparison with the other, the temptation is usually too great to resist, frequently leading scholars to emend the Stentoften form.¹⁵⁵ If, on the other hand, KJ 96 **runono** is accepted as intended, the usual recourse is to analyse it as a weak gen.pl. form,¹⁵⁶ but problems then remain in trying to interpret what appears to be a syntactic phrase **hiderrunono**. Klingenberg translates 'den Glanz der Runen (verberge ich hier [...])',¹⁵⁷ but this merely reinforces the general suspicion of attempts to divide the sequence as ON *heiðr* plus *rúnar*.

If we take KJ 97 Björketorp **runo** at least as moderately reliable, then we have an ending in **-o** which fits in well with the parallels seen in Gothic *gibo*, OHG *gebono*.¹⁵⁸ Throughout the Germanic languages the gen.pl. exhibits an anomalous tendency to avoid early shortening, which has conventionally been attributed to the circumflex tone carried by the syllable. However, recently the theory has come into vogue that the original IE gen.pl. ending consisted of short **-om*, and that therefore the

155. As does Antonsen 119.

156. The view most frequently encountered is that seen in DR 357 and DR:753 where an alternative *n*-stem gen.pl. form for the precursor of ON *rún* is assumed. However, despite the parallels from other languages quoted by Noreen 1923:§373 Anm. 5 the positing of such an ending for *urnordisch* seems to have little to recommend it. Alternatively Grønvik 1987:§23.5 takes **runono** as the gen.pl. of an *n*-stem personal noun along the lines of ON *rúni* or *rúna* 'friend, confidant(e)'. On formal grounds this has the advantage of accounting for the form more neatly, and although it probably also entails seeing the **ga-* prefix as already lost by the time the text was written, this does not seem too cogent an objection. However, the most serious problem with most of these approaches is that they rely on dubious interpretations of the preceding runes **hider-**, see below §7.12.2.

157. 1973:§37.

158. Although as a transitional inscription, there is no certainty that the form can be taken as representative of the *urnordisch* ending. If the interpretation of KJ 17a Eikeland **wiwio** as a gen.pl. form is accepted, then this supplies a further attestation, albeit apparently from the masculine *a-* rather than feminine *δ*-stems; but this is unfortunately not certain enough to build upon, see below §7.11.

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long reflexes in Germanic as elsewhere must be due to secondary affixation of this desinence onto the various stem vowels.¹⁵⁹ This is not to say it has reached generally accepted status,¹⁶⁰ but since many scholars prefer to work without the expedient of the *Dreimorengesetz*, it follows that something must be put in its place. In many of the IE dialects, it is striking that the gen.pl. above all case endings seems to be especially prone to extension. Thus Vedic Sanskrit exhibits frequent disyllabic **-a-am* endings, which may be reflexes of an original sequence of stem vowel plus **-om* subsequently extended even to athematic stems.¹⁶¹ In particular the IE *ā*-stem gen.pl. is susceptible to reformation, cf. the parallel adoption of *n*-stem endings in Sanskrit and OHG and the pronominal **-āsōm* inflection in Greek and Latin.¹⁶² Given this, it does not seem too implausible to argue that in Germanic too the attested endings are due to addition of the gen.pl. morpheme **-om* to the various stem vowels with subsequent levelling of the longer variants to all classes. This gives us our late proto-Germanic ending **-ō* which underlies Gothic *-ō*, OHG *-o* and ON/OE *-a*.

5.11. *The weak n-stem nom.sg.*

The prehistory of the *n*-stem nom.sg. endings has possibly given rise to more awkward problems than any other aspect of the Germanic *Auslaut-gesetze*. One factor contributing to the confusion seems to be that scholars have tended to derive them in neat straight lines from IE prototypes and

159. Kortlandt 1978:281,290; evidence from both Slavic and Irish appears to indicate original **-om*.

160. For instance, Jasanoff 1983:142-44,187-88 argues that the traditional **-ōm* has the backing of Indo-Iranian, Greek and Germanic and therefore can be considered original.

161. See Kurylowicz 1968:§10 and Szemerényi 1990 VII:§2.1.

162. See Szemerényi 1990 VII:§7.1, Rix 1992:§144.

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not taken enough note of the possibilities of internal analogy; another is that the historical picture is difficult to evaluate. A quick sketch of the situation as it can be reconstructed for the proto-language reveals that we seem basically to be reckoning on original masculine and feminine nom.sg. forms of the shape **-ōn*, possibly but probably not also with a variant **-ēn*. For neuter formations like Germanic **namn-* 'name' we can assume on comparative grounds an original final vocalic nasal **-n̥*, although this is not directly traceable in Germanic.¹⁶³ In addition, a final circumflex **-ō̃* has frequently been posited, in particular to account for the West Germanic masculine nom.sg. ending **-o* seen in OE *guma*, OHG *gomo*. The basic prop to demonstrate the existence of such a circumflected nom.sg. is the Baltic evidence, which however seems insufficient for the task.¹⁶⁴ But without recourse to convenient tonic distinctions, it has proved difficult to explain the nom.sg. forms without resorting to fairly extreme types of paradigm analogy.

5.11.1. *The n-stems progression from Indo-European to Germanic.* On the face of it, the Gothic evidence looks plausibly easy to account for. The masculine form in *guma* can be derived straight from IE **-ōn*, whilst the feminine ending in *tuggo* and the neuter in *hairto* are due to levelling of the medial **-ō-* which runs throughout the feminine paradigm and appears in the nom./acc.pl. in the neuter.¹⁶⁵ It is interesting to note that in all the

163. Szemerényi 1990 VII:§3.1, §3.2.

164. As regards the *n*-stem nom.sg., Hollifield 1980:31 concludes on the basis of Lithuanian *-uō* and Germanic **-ō̃* that 'the equation of the Germanic and Baltic phenomena is certain'. However, Balto-Slavic agrees with Vedic, unlike Germanic, in exhibiting loss of the final consonant in both *r*- and *n*-stems, and since a final circumflex tone arises in the nom.sg. of both stem classes, as in Lithuanian *akmuō* 'stone' (Greek ἀκμῶν 'anvil'), *duktē* 'daughter' (Greek θυγάτηρ), this equation seems in fact rather uncertain. Lane 1963:159 also finds the idea that loss of the final nasal should lead to lengthening of the preceding vowel 'patently absurd'.

165. Although for the neuter we could wish for some better justification within the paradigm for the spread of *-ō-*, especially since the declension pattern of certain forms like *namo*, *namna* has no oblique form containing this stem vowel. It is

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Germanic languages the feminine and neuter agree with one another against the masculine, though according to the traditional reconstruction in different etymological directions. The Gothic evidence could be equally well interpreted by arguing that the stem vowel grade was levelled from the oblique cases to the nom.sg. Extension of the stem vowel proper to, say, the acc.sg. has also been invoked for the masculine nom.sg. in urnordisch, and would appear to work convincingly everywhere except for OHG. When Lane suggested that the OHG nom.sg. *gomo* was in fact due to such analogical levelling, the major difficulty was that the nom.sg. was only attested as *-o*, whereas the original acc.sg. and nom./acc.pl. endings seemed to be represented by *-un*, weakened early to *-on* only in some dialects.¹⁶⁶ However, the problem depends crucially upon the date of any such analogical transformation. The continental Germanic dialects are unique in that they consistently exhibit signs of raising in the masculine acc.sg. ending **-an(u)*, giving OHG *hanun*, OS *hanon* alongside OE *hanan*, ON *hana*. The OHG nom.sg. ending *hano* might therefore be explained as the result of the transplanting of the raised variant into a position where it was no longer conditioned by its environment, so being phonemicised and collapsing with the West Germanic **-o* ending seen, for instance, in the gen.pl.¹⁶⁷

Although I hope it has some merit as a contribution, this is not intended to be a comprehensive account of the development of the *n*-stem nom.sg. within Germanic. Rather it is an indication of the paths open to us in constructing a credible theoretical sequence of events, taking into account at all stages the synchronic pressures which are likely to have been inherent within the paradigm. If nothing else, hopefully we can move away

possible that the model of the apophonic *r/n*-stems may have helped propagate a neuter nom.sg. ending in **-ō* if we assume Gothic *wato* is the regular development of Germanic **wodōr*, see Szemerényi 1990 VII:§3.4.

166. Lane 1963:161, Braune ~ Eggers 1987:§221 and Anm. 3 and 4.

167. Cf. below on raising, §7.11.1-7.11.3. This explanation of the nom.sg. is certainly compatible with the account given by Hollifield 1984:42-46.

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from the method of explanation which requires the rigid mapping of one Germanic ending to one IE sandhi variant. Admittedly such approaches as I have sketched here tend to be rather messy and inelegant, but the alternative is naïve simplicity. And in any case, even this preliminary account is not really any more complicated or awkward than the traditional theory which has stood for much of the last century, according to which the nom.sg. ending **-ô* supplies the Gothic feminine and neuter endings but the West Germanic masculine nom.sg., whereas **-ôn* gives rise to the Gothic masculine *-a* but the feminine and neuter endings elsewhere.¹⁶⁸ Not only is this remarkably convoluted in terms of dialect geography, but in addition it is difficult enough to find any other branch of Indo-European where original masculine or feminine nom.sg. forms both with and without **-n* are attested.¹⁶⁹

5.11.2. *The attested urnordisch evidence.* Scholars have identified two distinct *n*-stem nom.sg. endings in the urnordisch inscriptions, those represented by *-o* and those in *-a*. In general, the criterion for establishing an *n*-stem name within these texts has unfortunately been rather too simple: identify as an instance anything without a final *-r*. Although some possible difficulties with this simplistic approach were mooted above (§3.1.1), the body of evidence is sufficiently large to enable us to try to judge its merits within a context. Looking first at the attested forms with the ending in *-o*, we find:

i) from the early Danish bog finds, two apparent names on weapons in Illerup lanceheads 1-2 and Vimose lancehead **wagnijo**, Illerup shield-mount 2 **nipijo**,

ii) two apparent names on 3rd~4th century Zealandic brooches, namely KJ 9 Himlingøje 1 **hariso**, Udby **lamo**,

168. Cf. Prokosch 1939:§84.

169. As indicated by Lane 1963:162, see Brugmann 1897-1911 II.2:§117.

iii) a feminine noun in KJ 25 Vimose plane **talijo**, if this is correctly interpreted as for ON *telja* 'cutter, (here) plane',¹⁷⁰

iv) a presumed name on KJ 42 Strårup **leþro**, where unfortunately the gender of the grave's interred was not ascertainable from the scanty remains,

v) the form KJ 86 **fino** on the Berga stone, possibly a memorial inscription,

vi) KJ 49 Førde **aluko**, for which compare the equivalent Ingvaëonic forms OE *Aluca*, OS *Aluco*,

vii) the very dubious KJ 54 Himmelstalund **braido** or according to Antonsen 44 **brando**.

Assuming for the moment that functionally and phonologically these all represent the same ending, then we have a fair number of examples spread about Scandinavia.¹⁷¹ On the other side, the attested forms in -a are:

170. According to Moltke 1985:87 'only the word **talijo**, plane, can be confidently interpreted'. Although we might wish to put a question mark after any expression of confidence, it seems to be the case that most alternatives have been proposed not out of an attempt to make any reasonable sense of the inscription, but because it was felt the orthography did not match up to the high standards expected of urnordisch runesmiths. Although admittedly the rest of the text has so far mostly defied interpretation, the form **talijo** itself seems to have been deliberately isolated by the runesmith who left a large gap between it and the rest of the runic sequence on side A, and therefore an analysis as a nom.sg. is not totally unjustified. On the other hand, the reading of the possible *n*-stem in **hleuno** 'protection' as advocated by KJ 25 has meagre grounds to support it.

171. A tentative further instance is the form **eho** on the Donzdorf fibula, but a brooch found in a grave in Baden-Württemberg is by virtue of its find location rather dubious evidence. This fibula, datable to c. 500, is of a Jutlandic type, and Düwel and Roth 1977 argue that the name of the maker is inscribed upon it, presumably therefore in urnordisch; however some tenuous logical steps are required to justify this assumption. Firstly, the fact that the text has a single-barred h-rune **H** does not prove the inscription was added in Scandinavia, since the recent reinstatement of the Weser bone inscriptions as genuine demonstrates that the forms of this rune are not as rigidly split into single-barred Scandinavian on the one hand as opposed to double-barred continental and Anglo-Frisian on the other as is conventionally supposed; see Pieper 1991. In addition, even though no such single-barred runes have yet been discovered in other inscriptions from continental Germany, the tremolo technique used for both decoration and inscription on the back means that there would have been little space for a second bar even had the runesmith wished

i) from the early Danish bog finds, names on weaponry like KJ 27 Kragehul spear-shaft muha,¹⁷² perhaps KJ 28 Kragehul knife-handle **bera**, Illerup shield-mount 1 **swarta**, possibly Illerup chape **firha**,¹⁷³ and even less certainly KJ 22 Vimose chape **ala** according to interpretations which rely on very dubious word divisions,

ii) also from the bog finds KJ 26 **harja** on the Vimose comb,

iii) KJ 65 Nordhuglo **gudija** which appears to be cognate with Gothic *gudja*,

iv) the form KJ 50 Strøm haha according to the pleasing if rather uncertain interpretation of Antonsen 45,

v) the form KJ 85 **harija**. on the Skåäng stone, which some have interpreted as containing a name in the nom.sg., **harija**.¹⁷⁴ I find von Friesen's emendation of the troublesome seventh rune * to † with assumed mistaken double crossing to be the most plausible reading,¹⁷⁵ and the form **harijan** has accordingly been cautiously quoted as an *n*-stem oblique case form elsewhere,

to add one. Secondly, it seems a fairly plausible scenario that the text could have been added for any customer who ordered the brooch from Germany, in which case it would presumably not be in urnordisch. Likewise KJ 8 Beuchte **buirso** is not certainly in a Scandinavian dialect, and will be left out of consideration; see below §7.4.

172. Or according to Marstrander 1952:26-31 .uha.

173. But this form is very dubiously read, and Stoklund 1987:297 suggests that 'because of the nature of the inscription however, we probably do not have a real word here.'

174. As for example Grønvik 1987:§31.3. However, it may seem a suspicious feature of such interpretations to find the *j*-, *a*- and *ʌ*-runes all in one inscription with the latter two apparently having the same phonological value.

175. As in 1928:19-20.

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vi) forms attested on bracteates such as KJ 117 Darum 1 **frohila**, KJ 118 Skonager 3 **niuwila**, KJ 127 Seeland 2 **hariuha**¹⁷⁶ along with the epithet **farauisa**, and KJ 137 Körln **waiga**,¹⁷⁷

viii) possibly KJ 14 Etelhelm **mrla** if this is to be emended to ***erla**. Grønvik treated this as a feminine *ōn*-stem nom.sg. ON ***jarla**,¹⁷⁸ but admitted that this relied on the assumption that the inscription was sufficiently late to show confusion of unaccented <o> and <a>. However, there are no pressing reasons to take a form ***erla** as a feminine rather than a masculine *n*-stem nom.sg. even if we accept the emendation in the first place.¹⁷⁹ Given the corrupted nature of the inscription, it might be just as well to emend to ***er(i)la(r)**.¹⁸⁰

To all appearances the endings in **-a** offer therefore an even larger spread than those in **-o** and there seems to be no distribution pattern specific to each.

A fairly standard attitude tends to view the forms in **-a** as the consistently regular masculine nom.sg. *n*-stem ending for urnordisch and attempts to explain away the instances of **-o**. There are two main thrusts to such arguments. The first is that the forms in **-o** may be indicative of other

176. Although the etymology of **-uha**, assuming this is segmented correctly, remains a mystery. The origin outlined by Antonsen no. 15 is implausible since Gothic *auhuma* probably comes from the **uf-* root, see Lehmann 1986:49-50, and although the parallel with Procopius's Erulian king Οχών is indeed suggestive, not much reliable gain can be got out of it, especially as according to Schönfeld 1911:176 the better manuscripts have Οχός, 'das nicht germanisch aussieht'.

177. Of equally obscure etymology assuming the form genuinely represents a Nordic dialect. Although the bracteate was found in Poland, Mackeprang 1952:45 classes it in 'den østdansk-sydsvenske Gruppe'.

178. 1981:218-19; see below §7.1.

179. Cf. the Old Swedish name *Jærle*; such an interpretation was already suggested by Kock 1891:257 footnote 2.

180. Indeed, Antonsen 110 believes he can read **mrlar** anyway. However, from his review of KJ in 1968b:631, it seems he may have derived this view from the photograph, which fails to inspire confidence on a point of detail like this.

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language groups,¹⁸¹ the other that they might be feminine forms as opposed to the masculines in *-a*. Unfortunately, neither of these is particularly appealing.

5.11.3. *The West Germanic hypothesis.* Although Krause identifies forms like KJ 9 Himlingøje 1 **hariso** and KJ 42 Strårup **lebro** as examples of the feminine nom.sg. ending, he adds that 'allerdings erscheint es nicht ausgeschlossen, daß es sich bei diesen beiden letztgenannten Namen um Männernamen mit der westgermanischen Endung *-o* (Typus ahd. *hano*) handelt'.¹⁸² This attitude seems prompted not so much by his general approach to the issue, but rather because these two inscriptions happen to stem from Denmark and fairly early in the urnordisch period; i.e. it is a compromise between the linguistic and the historical picture. Since endings in *-a* are also found in the earliest Danish inscriptions, this presupposes some blurring of linguistic boundaries, which is a perfectly credible idea. On the other hand, it is less clear that it is a justified procedure to appeal to a different language group when we run into trouble with our linguistic analyses while leaving it out of consideration the rest of the time. If the West Germanic hypothesis is favoured, then it represents, as it were, the thin end of the wedge. Subsequently there would be nothing in the way of viewing Illerup shield-mount 1 **swarta** and similar instances as West Germanic strong nouns with loss of final **-z*.¹⁸³ As far as I am aware, no-one has proposed this.

181. And so are not really urnordisch at all, except by infection on a small scale.

182. 1971:§58,5.

183. This was after all posited for Illerup shield-mount 3 **lagubewa** by Antonsen 1987:24, though for some criticisms see above §3.1.1. Krause 1971:§6 presents some data suggesting very early loss of final **-z* in West Germanic, but as always when dealing with forms transcribed by classical authors, caution is advisable. The same applies to the assumption that during the Roman Iron age period all the West Germanic languages were sufficiently unified to avoid significant dialectal time-lags in their development.

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The discovery of two forms on the Illerup lanceheads 1-2 **wagnijo** and the Illerup shield-mount 2 **nipijo** has set the West Germanic theory back a stage further, since now even the correlation between proposed West Germanic linguistic forms and tribal settlements (in as much as history and archaeology can recover these) does not hold good. It can be demonstrated archaeologically that these Illerup finds from site 2 were brought from the east by peoples inhabiting what is now the western coast of Sweden up into the Oslo fjord.¹⁸⁴ Despite the vagueness surrounding the historical situation in Roman Iron age Denmark, there are few who would argue that a linguistically West Germanic people lived in Sweden during this period. Admittedly the arguments are fairly obscure, since it is uncertain at times when scholars are making appeal specifically to the so-called Erulians of classical fame or to the original inhabitants of Jutland, assumed to have left the region in order to participate in the *Adventus Saxonum* in England.¹⁸⁵ However, although it seems fairly well established that the Danes invaded Jutland during the 5th and 6th centuries,¹⁸⁶ still no evidence can be gleaned that points to a West Germanic language being spoken in Jutland at any time, and it is unjustified to rely on historical accounts of tribal invasions as proof of linguistic differences.¹⁸⁷ In any event, of our other

184. Ilkjær and Lønstrup 1983:116.

185. See von Friesen 1924:45-81, also Skovgaard-Petersen 1977:95 where, concerning the theories about various ethnic groups in Roman Iron age Denmark, the qualifier is expressed that 'der er ingen grund til at tro at danerne kunne skelnes fra andre befolkningsgrupper i disse egne på antropologiske, sproglige eller kulturelle kendemærker'.

186. H.F. Nielsen 1989:6 reckons that 'Denmark [...] probably was not definitely subjugated by the Scandinavian Danes until the 6th century', cf. Schwarz 1956:206-07.

187. After all, as has often been pointed out but rather less often actually appreciated, there is no reason why a linguistic boundary should coincide with a religious, ethnic or cultural one. Equally, without archaeological backing, tribal movements like the Danish invasion of Zealand and Jutland are just as plausibly understood as the imposition of a new aristocratic elite upon a little-changed population; Skovgaard-Petersen 1977:191 notes that 'under folkevandringerne har kun en lille

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inscriptions only KJ 42 Strårup **lebro** comes from Jutland, whilst the fibula types represented by KJ 9 Himlingøje 1 **hariso** and Udby **lamo** seem to be part of the production line of a specifically Zealandic centre of metal-working.¹⁸⁸ Of course, no-one would want to, or try to, rule out the idea of travelling craftsmen. Nevertheless, on the whole there is little evidence which might indicate that the names in **-o** represent a West Germanic ending, and a fair amount which points in the opposite direction.

5.11.4. *The question of gender.* A more common tack involves the equation of the endings in **-o** with the ON feminine *n*-stem ending **-a**.¹⁸⁹ A slight point of support for such a view lies in the two forms which were interpreted above as the progenitors of two real Old Norse words, KJ 25 Vimose plane **talijo** for ON *telgja* 'cutter, (therefore) plane' and KJ 65 Nordhuglo **gudija** for OI *goði*. On the face of it, therefore, we might assume that this supplied evidence for the <o> ~ <a> split formally differentiating gender. Although **gudija** appears to be a slightly different stem formation from *goði*, the analogy of Gothic *gudja* has led most commentators to assume the word is masculine. On the other hand, ON **telgja* appears only as part of the epithet of king Ólafr *trételgja* Ingjaldsson and possibly as NI *telgja*.¹⁹⁰ It seems uncertain that we can deduce from this that a posited urnordisch word 'plane' should necessarily have been a feminine *jōn*-stem formation. It is also worth pointing out that,

kærnegruppe repræsenteret den etniske kontinuitet i stammen.'

188. Stoklund 1991:§3.1.

189. Which has in fact long been approaching the status of standard wisdom. Von Friesen 1924:84,86,89,97 takes it for granted that names in **-o** are grammatically feminine despite his well-known views that many of the names in the urnordisch inscriptions have more in common with West than North Germanic nomenclature; the same view is taken by Jóhannesson 1923:§§137-38.

190. See Blöndal Magnússon 1989:1033 and NIP:387. In Söderwall 1884-1918 II:678 Old Swedish *trætælgia* is translated as 'timmerya', although rather tentatively, whilst it seems quite possible that Icelandic *telgja* is in fact a ghost-form extrapolated from the name.

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although we have to deal with such limited evidence as we have available, a contrast of one unreliable form against one other is a dubious basis for setting up -o vs. -a as a gender distinction.

In any case, viewing -o as a feminine ending soon runs into trouble elsewhere. It seems most probable that we should assume Illerup **wagnijo**, **nipijo** are masculine names since found on weaponry,¹⁹¹ and the same applies to Udby **lamo** if we assume the average metalworker of the period was more likely to be a man. Apart from these the presumed names KJ 9 **hariso**, KJ 42 **lepro** and KJ 49 **aluko** could be either gender, although on semantic grounds **hariso** at least looks more likely to be masculine, whilst KJ 86 **fino** is often taken as a member of some sort of *Ehepaar* with the other name in the inscription **saligastir**, although the grounds for this are meagre. As befits his methodology, Antonsen 14, 22 and 51 follows the older view and interprets **hariso**, **lepro** and **aluko** as female names, whilst similarly Marstrander notes 'h a r i s o, kvinnenavn i nominativ hvis innskriften er nordisk eller østgermansk, mannsnavn hvis den er vestgermansk. [Footnote 1:] Det samme gjelder Strårups l e p r o. Gravens kjønn er i begge tilfelle ukjent. Navnet kan betegne eieren, en kvinnelig runemagiker eller hennes overordnede.'¹⁹² Again we must consistently be reminded of the fact that our body of evidence is so small as to make arguments from silence perilous in the extreme, but it raises some uneasiness that there is so little convincing evidence throughout the urnordisch inscriptions for grammatically strong feminine names which

191. Assuming of course they are the names of the smiths or owners. Moltke and Stoklund 1981:68-70 argue that since there are several instances of **wagnijo**, and one of them is not incised but stamped, it is likely to represent the name of the smith. As noted by Stoklund 1987:291, although with no grounds actually given, 'we have to leave out of consideration a female armourer [...] and probably also a "Runenmeisterin"'. However, N.Å. Nielsen 1984:4, for instance, proposes the alternative view that it is the name of the weapon. If so, it may presumably represent some sort of brand name, added to a number of weapons turned out from a single locale.

192. 1952:72, although according to KJ:30 the Himlingøje 1 fibula (KJ 9) with **hariso** was in fact found in a woman's grave.

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would probably be recognisable by the nom.sg. ending in *-u*.¹⁹³ Instead, all our clear posited instances appear to be of those monothematic and hypocoristic formations which throughout the Germanic languages adopt the *n*-stem inflexion. It is therefore possible that it is only our problems with interpreting the *n*-stem nom.sg. ending which lead us to argue that many of them are feminine.

At any rate, from **wagnijo**, **nipijo** etc. it seems probable that we are to reckon on at least some masculine forms in *-o*.¹⁹⁴ From the observation that grammatical and real gender need not coincide, it has been advocated that these names then represent formations of the OI *Sturla* type, that is they are grammatically feminine but masculine in reference.¹⁹⁵ Despite the surface plausibility of this, the Germanic languages show a tendency to level out real and grammatical gender and reinforce the distinction between masculine and feminine endings in names as elsewhere, and it is more customary to assume that this *Sturla* phenomenon is an innovation borne of the frequent affixation of epithets and nicknames which come to be used as proper names.¹⁹⁶ So Janzén claims that 'att ett feminint ord användes om en man innebär något nedsättande; i synnerhet benämndes fega personer så'.¹⁹⁷ Although this might be considered extreme, it seems clear that grammatically feminine names given to men are not the norm. In addition, as perhaps befits their earlier status as nicknames, these later examples tend to be etymologically transparent, as in *Gnúpa* from *gnúpr* 'peak, overhanging ledge'. The etymologies proposed for forms like **wagnijo**,

193. We may presume on the basis of §3.12 above.

194. The attempts by Meli to defuse the implications of the Illerup and Vimose finds are unconvincing, relying on a dubious sense of the verb **tawjan* as 'to dedicate, consecrate', see 1989:140-42. He also fails to take into account the fact that **wagnijo** has been found on three spear-blades from two different locations.

195. See the references in Stoklund 1987:292.

196. See Brøndum-Nielsen 1950-73 III:§490 Anm. 3.

197. 1947:54.

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nipijo, **hariso** and **aluko** are not easy to fit in with this,¹⁹⁸ and overall the theory has little in its favour, especially on the widespread scale needed to explain the evidence.

5.11.5. *A chronological progression mooted.* The idea of a diachronic progression from **-o** to **-a** is central to the West Germanic theory, while if we assume forms in **-o** to be grammatically feminine, on the other hand, there is no need, nor any explanation, for any chronological development. Due to the difficulties inherent in the two approaches just discussed, an alternative would be desirable, and one possibility, rather similar in essence to the West Germanic theory, is that **-o** and **-a** represent two formally distinct masculine *n*-stem nom.sg. endings.¹⁹⁹ Whereas **-o** is interpreted as reflecting the inherited Germanic form in ***-ô**, the forms in **-a** are explained as due to analogical extension of the stem vowel of the oblique cases into the nominative. Since it was proposed above that the *n*-stem nom.sg. ending in the West Germanic languages was itself likely to be of this second origin, so obviating the need for any reconstructed form ***-ô**, it is apparent that there will be little common ground between this view and my position.²⁰⁰ Nevertheless, it raises two important points. The second is the

198. Although **lepro** for ON ***Leðra** does work, cf. Krause 1971 no. 93, and so might **lamo**.

199. As in Grønvik 1987:§36.1.1.

200. Halvorsen 1984:24-27 points out there are no grounds within Norse for assuming a divergence in development between ***-ô(n)** and ***-ôn**, and therefore, if we assume that certain attested instances of nom.sg. **-o** are in fact masculine and others feminine, there is no reason to assume they represent different phonemes or have different etymologies. Although in his defence Grønvik 1984:67 argues that 'det passer bedre med de ieur. data å ansette urgerm. **-ô** i nom.sg. mask., og **-ôn** (< ieur. **-ā + n**) i fem. og ntr. sg.', I can see no basis for such a claim other than the traditional explanation of the West Germanic forms. It might, on the other hand, be possible to argue that both the masculine and feminine nom.sg. endings collapsed in early urnordisch in ***-ô** from IE ***-ôn**, and that these are represented by the forms in **-o**; the spellings in **-a** could then represent the intrusion of the oblique stem-vowel into the masculine nom.sg. However, this would imply that the analogical replacement of the masculine nom.sg. in ON was independent of the similar

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idea that a chronological development can be discerned within the urnordisch inscriptions, although as presented below it differs from the way Grønvik envisages it. But first some note must be made of the theory that the urnordisch endings in **-a** are due to an analogical levelling and so can be equated neither with an IE prototype nor with the later ON reflex in *hani*.

5.11.6. *Problems with the a-rune.* In the early days of investigation into the language of the urnordisch inscriptions, there was less hesitancy concerning the niceties of analogical pressures within the *n*-stem paradigm. Instead, as seemed perfectly reasonable, the ending in ON *hani* was favourably compared directly with the type seen in classical Greek ποιμήν, ποιμένος and an IE nom.sg. ending **-ēn* or **-ê* reconstructed, especially for nouns with oxytonic accentual paradigms. Therefore the urnordisch forms were logically forced to don the robes of the middle-man, and because the only spellings were in **-a** and **-o** various devices were needed to explain the discrepancy (since on the face of it we might rather have expected **-e* or even **-i*). To be fair, most commentators have found the **-o** endings difficult, so the fact that the escape routes usually posited for forms such as KJ 9 Himlingøje 1 **hariso** were unsatisfactory is not a severe disadvantage of this traditional idea. On the other hand, the forced interpretation that **-a** represented the front vowel that was the medial stage between IE **-ē(n)* and ON *-i* is. This was nevertheless still the view favoured, for example, by Krause, who by fine sleight of hand managed in his presentation to separate the *n*-stem nom.sg in 'Urn. **-æ**', written **-a**, from the 3rd pers.sg. pret.ind. ending in 'Urg. **-ē**', written **-e**, even though they presumably represented the same vowel.²⁰¹ There are however cogent arguments against this position.

phenomena in other Germanic languages, and that it took some several centuries to be completed.

201. 1971:§28,5 and §58,11-12.

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Right at the beginning of the chain of events, a major problem is the difficulty in demonstrating the existence of a reflex of an IE *n*-stem nom.sg. ending **-ēn*, since there is nothing else within Germanic to support the assumption of such a type alongside **-ōn*. No well-attested form of the ending in **-ēn* appears anywhere outside Greek,²⁰² and even there it only appears reliably in forms of dubious etymology; Szemerényi therefore reckons that reconstructing a general IE **-ēn* ending has little to recommend it. Although he tones down this claim elsewhere,²⁰³ it is supported by Rix who claims, for instance, that the usually quoted example ποιμήν is analogical for original **-ōn* with extension of the front vowel proper to the oblique cases in **-en*.²⁰⁴ In the absence of reflexes of a putative **-ēn* ending in Italic, Celtic and Balto-Slavic, it does not seem justified to rely on such a reconstruction within Germanic.

It seems generally accepted that the first impulse actually to replace this traditional view was provided by Nils Lid, who pointed out that early loans of *n*-stems into Lappish frequently have a final *-o* as in *mānno* 'moon' from ON *máni* (cf. OHG *māno*), and reasoned that therefore an ending in **-ō* should be posited for urnordisch as well as for West Germanic.²⁰⁵ Nevertheless, in the face of counter-examples in related languages like Finnish *kana* 'chicken' from ON *hani*,²⁰⁶ it is notable that Juntune cautiously observes, especially regarding the *n*-stems themselves, that 'if a Germanic word ended in a specific vowel, it is likely that that vowel would appear in the Finnish borrowing, but the converse is not true: that a specific vowel appears in a Finnish word by no means proves that the

202. Szemerényi 1960:158-59.

203. Szemerényi 1990 VII:§3.1.

204. 1992:§159c and §165, cf. Lithuanian *piemuō*. This is also argued more explicitly by Szemerényi 1960:162,164 who ends up rejecting the notion of a Germanic nom.sg. ending **-ēn*.

205. 1952:237-38.

206. Juntune 1973:14.

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Germanic form must have had the same vowel, or any vowel, for there are too many other variables through which that vowel could be introduced'.²⁰⁷ It seems unlikely that this argument of Lid's can provide secure backing for the notion that the *n*-stem nom.sg. had specifically the form *-*ō* in urnordisch.

Instead for many scholars the real issue is the question of the fate of Germanic **e*¹ in unaccented syllables and the range of phonetic values which could be expressed by the urnordisch *a*-rune, since a good case can be made for the traditional view being internally incompatible. As presented in summary by Stiles,²⁰⁸ there are two facets to this argument. Firstly, it is notable that there are no instances when an *n*-stem nom.sg. form appears as final *-*e*, whereas this is the standard orthographical representation elsewhere for urnordisch **ē*, whether from Germanic **e*¹ as in (probably) the 3rd pers.sg. weak pret. ending (§8.6), or from earlier **ai* as in, for instance, the masculine dat.sg. ending (§5.1). If we posit *-*ē* for both endings, then why are they so consistently spelt differently? Secondly, it is reckoned a distinct weakness of the traditional theory that it requires so much manipulation of sub-phonemic variation which is presumed to be linguistically insignificant but which regularly appears in the spelling.

I believe that at least two factors render Stiles's ground rather less certain than it may appear from his presentation. In the first place, as I concluded above (§5.3.3), there are no good grounds for positing a long unaccented phoneme /*ā*/ within urnordisch, and therefore, if pushed, a case could be constructed which saw unaccented *[-*ā*] as spelt -*a* because it was close enough phonetically to short /*a*/ to be identified with it, at least orthographically. The argument that, if a runesmith so identified *-*æ* with *-*a* that he spelt them equivalently, it must imply that they were the same

207. 1973:40. This presupposes that similar factors could have operated in both Lappish and Finnish.

208. 1984:6-9,13-18.

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phoneme for him,²⁰⁹ may be methodologically sound but is clearly faulty logic. There is nothing which indicates the elder futhark was a perfect orthographic system, and any theories based on those lines must be derived from the evidence and not assumed as a methodological axiom. It would be a brave scholar who in the face of the First Grammarian would identify the root vowels in OI *sór*, *sǫr* as phonemically equivalent for early Icelandic scribes merely because they were both spelt as <sor>, and such examples could be multiplied indefinitely. The second point leads on from this, in that there are in fact instances where *-ē seems to be represented by -a, most notably in the Udby fibula **talgida** which was found subsequent to publication of Stiles's piece, but also quite possibly in KJ 76 Opedal **swestar** (§7.12.5). The implications of this are worked out in the summary (§9.2).

Despite these reservations, the bottom line remains. Aside from all the other difficulties, the most awkward problem with the traditional doctrine according to Krause and others is simply that other attestations suggest that the reflex of Germanic *ē¹ was more usually spelt <e>,²¹⁰ whilst there are no recognised cases of the *n*-stem nom.sg. ending appearing in such a form. There are too many difficulties with the reconstruction and too many internal inconsistencies for the notion that IE *-ēn comes straight through urnordisch -a to ON -i to be accepted. A replacement is needed, and the one usually advanced is that ON -i is a secondary extension from original *ijan*-stems after the loss of the analogically extended nom.sg. *-a at syncope.²¹¹ Although this has so far mostly been proposed as a purely theoretical alternative, it is just possible that the forms KJ 97 Björketorp **weladaude** and KJ 96 Stentoften **weladud** supply direct evidence for the

209. Stiles 1984:7-8,38-39 (note 16).

210. Assuming KJ 76 **swestar**, KJ 14 Etelhelm **wrta** and others are dismissed, either completely or as less common graphic variants.

211. For instance, Antonsen 1970:313-15.

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stage where the endless nom.sg. was replaced by *-i*.²¹²

5.11.7. *And back round to the beginning.* So we posit for urnordisch extension of the stem vowel **-a-* into the nom.sg., and therefore this ending **-a* is actually attested in forms like Illerup shield-mount 1 *swarta*. The original problem remains, but from a different perspective: what does the split between *-a* and *-o* in the urnordisch forms signify?

Despite the qualifications expressed above, it remains plausible that at least partly it could reflect a difference of gender. On comparative grounds, the Germanic languages as a whole show a clear distinction between the masculine which tends to adopt **-a-* and the feminine which prefers to level **-ō-* throughout the paradigm. Likewise for the oblique cases as well as the nom.sg., there are some tentative signs which have usually been interpreted as indicating that *<a>* at least is a masculine marker. However, since it seems likely that some instances of *-o* represent a genuine masculine *n*-stem nom.sg. ending, and since there are no convincing models for assuming two distinct such endings for urnordisch, it is worth examining the possibility that they are in fact the same. As such a

212. As long as we assume that, due to the parallelism of the texts, we can analyse both forms as weak nom.sg. adjectives. Following von Friesen 1916:18-19, the Björketorp form KJ 97 *-daude* is analysed as weak by Krause 1971:§94,1 and Brøndum-Nielsen 1950-73 III:§480,1, who believe it represents the **-æ* ending being fronted again on the way to ON *-i*. On the other hand, the form KJ 96 *weladud* has proved more enigmatic, and von Friesen 1916:51 suggested it was just due to irregular orthography with two runes missed out. If we suggest instead that this accurately represents the endless stage after apocope of the final **-a* but prior to the addition of the ending proper to the *ijan*-stems, the later stage which may be attested in KJ 97 Björketorp *-daude*, then the stones give a rationale for the distribution of the two forms, in that KJ 96 Stentofte *-dud* is written within a long sprawling line, whereas the Björketorp text is more carefully laid out into rows of roughly corresponding length, and the form KJ 97 *-daude* comes at the end of one of these lines. It is possible then that when the carver of Björketorp came to the weak nom.sg. form of **daud-* he added the innovative but as yet optional final inflection for two reasons; to fill up the space to make the line equivalent in size to the majority of the rest, and because it might be expected that here there was in his mind more of a syntactic break which could be filled by a vowel ending not yet fully developed in all registers, whereas on the other hand the Stentofte carver went rushing straight on through the sentence at this point.

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proposal would involve discussion within the framework of the urnordisch orthographic system as a whole, I will leave its detailed presentation to the summary chapter (§9.1.1). Before ending here, I will just note again that a chronological progression is not only perfectly compatible with the urnordisch evidence, but seems in a sense to be positively demanded. The early evidence²¹³ clearly indicates that *-o* and *-a* could be used side by side to represent the masculine *n*-stem nom.sg., but in the later period, as exemplified above all by the bracteates, *-a* predominates. Any valid theory therefore needs to account for this development as well as the orthographic fluctuation.

213. Say, up to c. 400, though naturally datings in real time are scarcely more than guesswork given the nature of their concoction.

6. PROBLEMS WITH LENGTH

6.0. *Introduction*

There are two morphological endings attested in the urnordisch corpus where the length of the vowel as we reconstruct it from comparative evidence is contradicted by the internal development of the Nordic languages, in that the syllable is unexpectedly lost at syncope. It is of course possible that this merely indicates that there are problems with the usual formulation of syncope, but even so it is to be hoped there are some identifiable factors which might help explain the divergent development in this couple of cases.¹ If, as the evidence suggests, the long and short vowel systems in unaccented syllables (and perhaps in accented too) were mismatched, then it is of primary importance to try to establish the state of affairs regarding quantity in urnordisch.

6.1. *The masculine adjectival acc.sg.*

This ending is clearly represented by KJ 75 Kjølevik **minino**. It is customary to identify KJ 50 Strøm **hino** as an example as well, albeit purely pronominal rather than adjectival in nature, but this attestation is in fact ambiguous given the fluctuating gender of its nominal referent **hali** 'stone'.²

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1. In particular it is possible that the binary long vs. short distinction in the urnordisch vowel system was not as absolute as I have assumed but rather could be neutralised in certain environments.
 2. As noted above §3.1.2. In fact, the clearest evidence for *i*-stem flexion, which is clearly the case here, is Old Swedish *hæl* which is feminine.

6. Problems with length

Unfortunately the comparative evidence available does not lead to any unified reconstruction of this ending for proto-Germanic. Gothic *blindana* and especially OE *blindne* point to something resembling Germanic **-anōn*, whereas to reach the attested stages in OHG *blintan*, Old Saxon *blindan* and ON *blindan* from such a reconstruction requires the assumption of an unparalleled loss of a final syllable in Germanic **-ōn*. According to Brøndum-Nielsen there are in fact no difficulties with the Norse ending in *-an* which ‘maa antages [...] at forudsætte en urnordisk Endelse *-anō* (snarest med nasaleret *-ō*, hvoraf senere *-a* (der svinder); næppe med unasaleret *-ō*, der maatte antages at skulle udvikles til *-u* og saaledes fremkalde *u*-Omlyd [...])’, and he later claims that the masculine acc.sg. ending has ‘den til urnord. *-anō* regelmæssigt svarende fællesnordiske Endelse *-an*’.³ However, this is not much of an explanation, since there are no indications that a final long vowel should be lost ‘regelmæssigt’ at syncope.⁴

Since this ending is pronominal in origin, it seems wise to examine what role the pronoun may have played in the affair. It is notable that OE *þone* matches well with *blindne* as does Gothic *þana* with *blindana*, while on the opposite tack OHG *blintan* corresponds to the endingless pronoun *den*. This agreement applies to all the Germanic languages except for Old Saxon where alongside the pronominal form *thana* we find the adjectival flexion fluctuating between the endings in *blindan* and *hēlagna* according to the structure of the root.⁵ If we were to invoke the influence of the pronoun, then ON *þann* does at least also show loss of the final vowel,

3. 1950-73 IV:§512,2 and §516,2. There is a possible parallel in the development of the neuter nom./acc.sg. adjectival ending, cf. Gothic *-ata* to ON *-t*, but Brøndum-Nielsen IV:§514,1-2 plausibly prefers to reconstruct the original ending as Germanic **-at*, thus ON *-t*, *þat* and OHG *-az*, *daz*, and believes the Gothic *-ata*, *þata* is a language specific innovation.

4. Walde 1900:89-91 assumes instead two competing endings in **-anō* and **-anōn* and argues that KJ 75 *minino* still represents the latter whilst the former has been generalised in ON.

5. Holthausen 1921:§§353-55.

6.1. The masculine adjectival acc.sg.

albeit with distinctive gemination of the final nasal, presumably by the same processes as *hann*, *inn*. In addition, although the masculine acc.sg. ending turns up in ON mostly as *-an*, it can also develop a reflex *-n* in various contexts, most notably in pronominal forms such as *hann*, *(h)inn*, *minn*, *pinn* and *hvern*, but also after certain formative suffixes such as *-in-* (thus *bundinn* but Old Swedish *kristnan* alongside *kristinn*), and some of those ending in *-r-* (as OE *annan*) and *-l-* (as in *líttinn*, *mikinn*).⁶ Although this bears some resemblance to the state of affairs as seen in Old Saxon *blindan~hēlagna*, it is not so great as to overturn the suspicion that it is coincidental.⁷ It seems more likely that a combination of low sentence accent and haplology (or at least a sympathetic liquid preceding) is responsible for the double syncope seen in *hann*, *líttinn* etc. As noted below (§7.13.1), there is no way to explain the retention of the final nasal in the ending *-an* without assuming that a syllable followed it in urnordisch, and of course this syllable appears to be directly attested in KJ 75 Kjølevik *minino*. So, to return to the question in hand, what is the length of the vowel represented by the final *-o*?

It seems possible that it is an important factor that the masculine acc.sg. adjectival and pronominal ending is a single disyllabic morpheme, where the sequence **-anð(n)* cannot be divided up into any constituent morphological elements. The best direct parallel for this situation is the present middle voice endings discussed below (§8.2.1), where again comparative evidence suggests that a final long vowel, here in fact a diphthong, which again is preserved as *-a* in Gothic and as *-e* in Old

6. See Noreen 1923:§428,5 and 1904:§454,4, Walde 1900:91-96.

7. Hesselman 1913:37 states that 'det ursprungligaste tillståndet föreligger givetvis i fornsaxiskan', and goes on to conclude 1913:43 that in Norse 'de ursprungliga ljud-reglerna ha varit desamma som i fornsaxiskan'; see 1913:43-45 for the details. I will merely note that Hesselman's views on syncope, though interesting and thoughtful, tend in general to create more problems than solutions, and this ending is a good case in point.

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English, is lost against all expectation in Old Norse.⁸ It seems plausible that to explain the evident apocope we can posit an abnormally early urnordisch shortening of long vowels and diphthongs in this particular environment, an environment which must be specified according to both morphological and phonological factors. Already Hesselman had thrown up the idea that the masculine acc.sg. ending **-anōn* might have been subject to more severe reduction leading to loss because it was separated from the root by another unaccented syllable, but this was simply one aspect of his overall scheme of Norse syncope which has been noted as unsatisfactory above.⁹

Unfortunately we have no way of determining when such a putative reduction could have occurred, though it might be plausible to place it before the development of the alternating accentual rhythm which it can be suggested underlies syncope. The form KJ 75 *minino* appears on the Kjølevik stone where there are essentially no diagnostic features to place the inscription remotely precisely within a chronology. The simple answer is then that there is no determining on this evidence the length of the final vowel in *minino*, so I will leave it here and see if the synthesis below (§9.4) can shed any light on the matter.

6.2. *The feminine ō-stem substantival acc.sg.*

Above (§5.6) it was noted that the only, albeit rather unreliable, evidence for the feminine acc.sg. adjectival ending was in *-o*. For the substantives the possible evidence is just as ambiguous, consisting of KJ 63 *Einang*

8. Unlike, say, the equivalent final **-ai* which leaves a syllabic reflex in the 1st pers.sg. *heiti* when directly following the root syllable.

9. 1913:36.

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runo, KJ 67 Noleby **runo**, KJ 74 Reistad **wraita** and KJ 130 Anm. Halskov **laþo**. Since none of these is secure, and **wraita** at least is peculiar to my own analysis, it is necessary to discuss any merits of each.

I tried above (§5.9) to demonstrate that the two instances of **runo** were more profitably seen as acc.pl. than acc.sg. forms, even though this flies in the face of most recent scholarship. Whilst it must remain a perfectly tenable alternative to assume the forms KJ 63 Einang and KJ 67 Noleby **runo** are in fact examples of the feminine acc.sg. ending, I hope at the least to have shown that they are ambiguous and can provide only circumstantial evidence for our reconstructions.

The other conventionally recognised instance of this ending is equally uncertain. Out of the sequence KJ 130 Anm. Halskov **laþo(b)**... Antonsen 108 splits off **laþo** as the acc.sg. form of ON *lǫð* 'invitation', which seems to appear frequently on bracteates in the nom.sg. form **laþu** (§3.12). However, as the runes following (and to some extent preceding) this form remain uninterpreted, it is difficult to conclusively prefer this word division over that offered by Krause of **laþoþ**, an apocopated form of KJ 130 Trollhättan **laþodu** with the word-final devoicing of fricatives attested in transitional inscriptions.¹⁰ On the whole Antonsen's interpretation seems more likely, but really only on an intuitive basis.

Finally we come to KJ 74 Reistad **wraita**, where again several options are open. Although Antonsen 41 interpreted the form as the 1st pers.sg. preterite of the strong verb **writan* with final IE **-a* still preserved, such a view opposes the conventional wisdom which regards loss of IE **-a*, **-o* and **-e* in absolute finality as one of the earliest proto-Germanic developments we can identify.¹¹ In fact, Antonsen's is a rather difficult

10. As in KJ 96 Stentoften **gaþ** for Germanic **gab(e)*.

11. Although by itself this is naturally of no significance if the only direct evidence available contradicts it. Lehmann 1961:70 uses the loss of such final syllables as the diagnostic feature marking the conclusion of 'proto-Germanic'. Since, unlike Lehmann, I believe final **-e* would have participated in the common Germanic raising to **-i* had it survived long, it follows that apocope of this vowel at least must in fact be fairly early; see below §9.1.

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position to oppose with any direct evidence, since of the strong preterite verbal forms attested in the urnordisch corpus none combine the virtues of being both reliable and of sufficient antiquity to be comparable.¹² However, if there is no trace of IE final **-a*, **-e* and **-o* being preserved in any Germanic language, it is not unreasonable to suppose they participated in this very early apocope, especially as later developments such as the final devoicing of stops in Old Norse strong preterite forms like *batt* can only be convincingly explained on this basis.¹³ Were the rest of Antonsen's interpretation accepted, then *wraitha* might provide exactly such a trace of IE **-a* and the chronologies would have to be re-assessed on the basis of attested evidence. But it seems that little reliance can be put upon his reading and translation,¹⁴ and there are a number of preferable alternatives.

Since Bugge KJ 74 Reistad *wraitha* has been more usually interpreted as a noun from the **writ-* root in the accusative, the sequence running **ek wakrað unnam wraitha** for ON *ek Vagr *(und-)nam *reit* 'I Wakrað know how to write'.¹⁵ However, if it is regarded as a *nomen actionis* from *rita*, then it is not obvious that it should be neuter as most scholars have assumed; rather this opinion is derived in a circle from the form's ending in *-a*.¹⁶ The later, formally if not semantically similar, reflex seen in OI *reitir*, Old Swedish *vreter* 'a marked out square of (arable) land' appears to

12. As quoted by Krause 1971:§103 and §105. KJ 61 Kalleby *was(...)* is probably the most convincing candidate, but it is uncertain if the inscription is preserved intact, see below §7.13.

13. Noreen 1923:§220.

14. See Høst 1977:153.

15. NIæR I:221-23. The translation given adopts the interesting if speculative notion proposed by Marstrander 1930a that **unnam** represents a preterite-present **undnam* unattested elsewhere.

16. For instance Krause 1971:§88,2.

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have been a *u*-stem.¹⁷ However, given the large semantic leap it may seem rather doubtful that KJ 74 Reistad **wraita** should be directly equated with OI *reitr*. Instead, at least if we follow Marstrander's interpretation, it seems plausible that **wraita** should be operating as a pure verbal noun equivalent in function to the infinitive, and most corresponding verbal nouns formed with the IE *o*-grade in the root are feminine in gender, as in ON *reið*, *þorf*, *flaug* and *þogn*, although some neuter formations like *hvarf* are also attested.¹⁸ At the risk of placing faith in each step of a rather tentative sequence, the indications are therefore that **wraita** could well be seen as a feminine acc.sg. ending.

Two further possible instances of feminine *ǫ*-stem acc.sg. reflexes are even less certain as evidence. An ending in **-a** is afforded by KJ 50 Strøm **haha** according to Krause's interpretation, but he in fact relies on the form exhibiting a masculine ending and the interpretation cannot really be considered established to any degree of probability (cf. §3.2). In addition, it is a perfectly viable possibility that KJ 97 Björketorp **uþarabasba** should be divided up as a feminine acc.sg. noun ***uþarfa**, cf. OI *óþorf*, the direct object of the verb *spá* in the 1st pers.sg present, although there seems no real way to make a decision between this and the more usual analysis as a nominal compound.

6.2.1. *The incompatibility of the etymology.* The comparative evidence for this ending leads us to posit a proto-Germanic ***-ǫn**, which according to the conventional wisdom is the origin of the ON adjectival flexion in **-a**. Under this view, then, the endingless acc.sg. ending of OI *gjof*, Old Swedish *giaf*, is anomalous and is usually considered to be the nom.sg. or even dat.sg. ending adopted by the accusative.¹⁹ In fact, only the nominative could

17. See de Vries 1977:439, although admittedly *u*-stem attestations are the exception rather than the rule, as in the OI acc.pl. *reito* in *Grágás*; see Finsen 1852:72, l. 22.

18. Cf., for instance, the data in d'Alquen 1988:§7.4, §7.6.

19. See Brøndum-Nielsen 1950-73 III:§445,2.

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reasonably be argued to have provided a formal model for restructuring the accusative in this fashion, since, as noted above (§5.7), the *ō*-stem dat.sg. is conspicuous throughout the Viking age and into early medieval texts by its retained syllabic ending *-u*, whereas no such signs appear in the feminine acc.sg.²⁰ Therefore if analogy is to be invoked to explain the disparity in development between Old Icelandic *gjof* and *blinda*, it must be from the nom.sg. ending.

However, no motivation for the replacement of the accusative by the nominative is particularly transparent, which has led some scholars to argue that the development in ON must be considered phonologically regular in the substantive, and that the adjectival form *-a* is due to secondary addition of a pronominal ending.²¹ Such an approach also requires assuming that all other instances of Germanic **-ōn* giving Old Norse *-a* are secondary, either due to contraction as in the stem formant of weak verbs class II **-ō(j)an* > ON *kalla* or the gen.pl. *gjafa* from **-ōan*,²² or due to late formation such as the 1st pers.sg. weak preterite in **-ōn* (assuming this is etymologically correct). Also, as noted above (§6.1), the masculine acc.sg. adjectival ending, if rightly reconstructed as **-ōn*, is lost at syncope as well.

However, the implications of such a view for the relative chronology of these developments are rather disturbing. In the first place, if any credence is given to the possible attested instances of the *ō*-stem acc.sg. ending listed above, then it is clear that the nom.sg. and acc.sg. did not fall together phonologically in urnordisch **-u*. On comparative grounds too there is little

20. The apparent *ō*-stem acc.sg. ending *-u* is only found attested in proper names and certainly seems to be a late development, perhaps in an attempt to disambiguate masculine and feminine formations with the same second element; see Peterson 1981:§4.3.1, §6.4, also Noreen 1923:§377 and §384 Anm. 5.

21. For instance Kortlandt 1978:298 note 27.

22. The gen.pl. is not so straightforward to explain as this suggests, but if a circumflex ending in **-ōm* is preferred, then either way a divergent development must be assumed for Germanic.

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to recommend the idea, since no other Germanic language shows signs of early shortening of the vowel here, nor are there any good external grounds for assuming it for urnordisch. Typologically, it seems original long vowels in final syllables were generally retained as such into urnordisch when they had been originally protected by a consonant. Also there is direct evidence for a development of Germanic **-ōn* to ON *-a*. Firstly, the 1st pers.sg. **-ōn*, if derived from an IE prototypical ending **-ōm* as most seem to assume,²³ must have existed in some function throughout the Germanic period. It is therefore unjustified to argue that since the dental preterite is a Germanic innovation, the ending is not original. The model for such an ending must have come from somewhere, and that model in its earlier role presumably underwent the same developments in unaccented syllables as happened elsewhere. Secondly, comparative evidence clearly suggests that the nom.sg. forms of the feminine and neuter *n*-stems are derived from Germanic **-ōn* (see §5.11.1), thus ON *kona*, *hjarta*. Again, it would be possible to build up a case where these endings were secondary or analogical formations, but since all the signs point unambiguously to a regular development of Germanic **-ōn* to ON *-a*, there seems little to be gained by overturning this just for a moment's convenience with the *ō*-stem substantive acc.sg. Instead, it seems preferable to assume that the adjectival ending in *-a*, not the endingless substantive form with *u*-umlaut (at least in West Norse), is the expected state of affairs.

6.2.2. *Analogy: the iō-stems come into their own.* If, however, the traditional view is adhered to, then how is any such analogical replacement of the etymologically correct acc.sg. ending in **-a* to be explained? There is a parallel here with the ON *i*-stem declension, where in similar fashion both acc. and dat.sg. are uninflected, but since I suggested above (§5.7) that the endingless dative in the *i*-stems was responsible for the gradual elimination of the *ō*-stem dat.sg. in *-u* throughout the medieval period due

23. Lühr 1984:46-49.

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to the mutual approximation of the *i*- and *ō*-stems, it is scarcely possible to suggest the same thing took place, only much earlier, in the acc.sg. as well. Since we have established that the regular development of the *ō*-stem dat.sg. is *-u* rather than *-Ø*, it must be to the nominative, not the dative, that we look for an analogical model.

Wessén argued that the late urnordisch *ō*-stem flexion with nom.sg. **-u*, acc.sg. **-ō*, merged with that of the *u*- and consonant stems which had **-u* in both the nom. and acc.sg.²⁴ In his view the catalysts were the agreement in the nom.sg. **-u* between all stem classes and in the gen.sg. **-ōr* between the *ō*- and *u*-stems, whilst perhaps also the equivalence between the nom. and acc.pl. endings in the ON *ō*-stems may have been extended into the singular. On the face of it, this gives a very persuasive model. Within the other Germanic languages, too, movement between the *u*- and consonantal stem inflections can be identified, presumably to be attributed to the merger in certain case endings like the acc.sg. in Germanic **-u(n)* and the acc.pl. in **-unz*.²⁵ However, apart from Germanic **handuz* 'hand', which is ultimately of obscure origin,²⁶ feminine *u*-stems are rather difficult to trace as a class. Since their virtual elimination is common to all the Germanic languages, it would be economical to suggest that this development took place within proto-Germanic, and that therefore a set of feminine *u*-stems cannot have provided a very large analogical base for the merger as envisaged by Wessén.²⁷ Therefore the onus of the restructuring

24. 1927:80-81. Although the extension of **-u* must be assumed to be analogical in the nom.sg. of the consonant stems, it can perhaps be inferred from the umlaut in OI *tōnn* and is probably to be seen as common to at least Northwest Germanic, cf. OE *hnutu*, *hnyte*.

25. Thus, for instance, Gothic *wintrus*, *fotus* and *tunþus* can all be identified on comparative grounds as originally athematic.

26. See Lehmann 1986:176-77.

27. Indeed, you can't have it both ways at once. Wessén discusses in 1927:102-07 the movement in West Norse of a fair number of original feminine *i*-stems to the masculine *u*-stems, cf. OI *dráttir* to Old Swedish *dræt*, although Noreen 1904:§413 Anm. 2 appears to consider the shift took place at least sometimes in the opposite

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falls onto the shoulders of the athematic flexion, and it may seem rather implausible that the fairly limited numbers of this class could have exerted such a powerful influence. Although quite a few feminine nouns adopt endings which are etymologically proper to the consonant stems, this seems to be an innovation which had already lost popularity by the period of the earliest manuscripts.²⁸ In addition, the popularity of the consonantal stem inflection applies mostly only to the analogical spread of the nom./acc.pl. ending in $-r$ with i -umlaut, but not to the singular endings.²⁹ All these points testify to the difficulty of accepting Wessén's combined δ -, u - and consonant stem inflection which he sees as the first step prior to the coalescence with the i -stems.³⁰ To argue plausibly for analogical replacement of a putative δ -stem acc.sg. $*-\delta$ with $*-u$ something else is needed; ideally we would like to be able to point to an internal factor within the δ -stem paradigm itself.

It seems plausible that just such a factor is offered by the feminine $i\delta$ -stems. As is well known, Germanic inherited from IE two distinct methods of forming the nom.sg. of this class, and by the time of our earliest texts the various languages have already regulated these endings according to phonological environment. The type represented by Gothic *bandi*, *mawi* appears to represent Germanic $*-i$ as opposed to *brakja* where the formative stem syllable $*-j\delta$ has been extended to the nom.sg. On comparative grounds the first group is convincingly equated with the type

direction. The obvious inference is that there was no feminine u -stem class in existence.

28. According to Bjorvand 1972:198-99. As it happens, in 1972:212 he favours the notion that the consonantal stem endings led to levelling of the δ -stem nom. and acc.sg.
29. It is, for example, less common for a noun to adopt the sg. flexion seen in *mqrk*, *merkr*; see Noreen 1923:§417 and Wessén 1927:82-90.
30. 1927:95.

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seen in Sanskrit *devī*, oblique *devyā*.³¹ However, it is notable that whereas in Germanic the acc.sg. joins the oblique cases with full grade of the stem vowel, thus Gothic *bandja* from **-i(j)ōn*, there are clear signs that originally the acc.sg. was formed with the vanishing grade as was the nom.sg., so Sanskrit *devīm*.³² It may seem a bit of a liberty to propose that endless accusatives were retained into Germanic, but since it is clear that this ancient type was preserved intact into the nom.sg., the possibility is worth examining. If we posit a development to a Germanic acc.sg. **-ī(n)* within the *iō*-stems, then this could certainly provide a model for the spread of an endless acc.sg.³³ Although a first step, there would still however be no exact equation between the nom. and acc.sg. forms of each class due to the shortening of the nom.sg. **-ī* to **-i*. If we assume therefore along with Szemerényi that the development in the acc.sg. was to late-IE **-ijm̥*, we can posit an *iō*-stem declension along the lines of nom.sg. **-i*, acc.sg. **-iju(n)*, gen.sg. **-ijōz*, dat.sg. **-ijū(i)*, which gives another model to support a shift of the *ō*-stem acc.sg. from **-ō(n)* to **-u(n)*. In addition, the IE *i*-stem class as exemplified by Sanskrit *vr̥kī-* would provide another route for an acc.sg. ending in **-iju(n)* to develop through **-ijm̥*

31. Szemerényi 1990 VII:§7.3.

32. The Greek evidence also reveals something different about the acc.sg. from the other oblique cases, though quantifying it is rather difficult. According to Rix 1992:§§141-42, the nom.sg. *-(t)α* with a short final vowel is due to vocalisation of a final laryngeal, i.e. from IE **-iH-* which elsewhere develops into **-ī-*, and this spreads into the acc.sg. *-(t)αv* replacing the expected form of the ending **-īv* from **-iHm̥*. On the other hand, Szemerényi 1990 VII:§7.3 reckons on a development via **-ijm̥* to Greek *-(t)αv* in the acc.sg., from which the nom.sg. was then reformed to *-(t)α*. Aitzetmüller 1978:90 also identifies a reflex of the zero grade ending in the Old Prussian acc.sg. *martin*, but Stang 1966:197 suspects that this ending may rather have been analogically levelled from the nom.sg., since Balto-Slavic seems to share the innovation of introducing **-jām* into the acc.sg., cf. Lithuanian *marčią*.

33. Cf. the putative Northwest Germanic *ō*-stem singular flexion nom. **-u*, acc. **-ō*, gen. **-ōz* with the *iō*-stems nom. **-i*, acc. **-ī*, gen. **-iōz*/**-ijōz*. Assuming that prevocalic [-ij-] and preconsonantal [-i-] could be identified as equivalent, then the *iō*-stem acc.sg. is endless on the analogy of the other oblique cases, where **-ī-* is the stem formant onto which case and number desinences are added.

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from IE $*-iH-m$, since this class appears to have had the endings proper to the athematic flexion throughout.³⁴

This remains of course wholly hypothetical. As I noted above, Christian Stang was uneasy with the notion that Old Prussian *martin* represented the reflex of an inherited acc.sg. ending in $*-im$ because the Balto-Slavic languages seemed to share a common innovation to $*-jām$; the same reservations could be applied to positing such an obliquely attested relic in one Germanic dialect.³⁵ The only defence which can be offered is that this idea is based on a relatively clear reconstructed declensional pattern and has the virtue of accounting for the evidence rather better than most other approaches; but there is of course a price.

6.2.3. *To sum up.* We have seen therefore that with a little effort a sufficient case can be made out for analogical elimination of the expected substantive δ -stem acc.sg. reflex in ON $*-a$, which appears in the adjectival declension. For urnordisch this may be reconstructed as the replacement of $*-\delta$ by $*-u$, and the question then remains to define the status of the forms which may give direct evidence for this ending. Since the model for replacement appears to have been the combined forces of the δ -stem nom.sg., possibly the stem vowel of the u - and consonantal stems, and the putative $i\delta$ -stem acc.sg. in early urnordisch $*-iju$, a spelling $*-u$ would be expected within urnordisch. Unfortunately, none such is forthcoming.

34. As used by Lindeman 1982 for the Old Irish $iā$ -stem gen.sg. in $-e$. The *vrkf*-type class was already invoked by Grønvik 1981:204, although his argument that the antiquity of the class demands the exact phonological equation of *ylgr* with Sanskrit *vrkth* seems to be unnecessary and unlikely, and was later retracted by him in 1984:68. The final nom.sg. $-r$ in the ON $j\delta$ -stems is more likely to be due to the influx of original i -stem nouns into this class; Wessén 1927:107 reckons that Old Swedish *hēp* preserves the original form of the ending.

35. Although other dialects also show endless variants in the $(j)\delta$ -stem acc.sg., none of the data gives unambiguous support for this proposal; see Dahl 1938:119-20, 149, Braune~Eggers 1987:§211 and Anm. 1, Holthausen 1921:§283,2 and §285 Anm. 1. Unfortunately, since the evidence is so muddled, there is little hope of reconstructing the original state of affairs.

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Instead we have several possible instances in **-o**, which if correctly identified must therefore presumably reflect the stage prior to transfer of ***-u** into the **ō**-stem acc.sg., and the tentative instances in **-a** of KJ 74 Reistad **wraitā** and KJ 97 Björketorp **uþarabā**. Since none of these two latter examples are particularly reliable, it would be justified to ignore them. But for **uþarabā** at least, it is possible that this represents the original ending ***-ō** before replacement, but which has undergone the transitional development which manifests itself as earlier **<o>** being superseded by **<ā>**, as also attested in KJ 97 Björketorp **runar**.

7. FORMATIONAL SUFFIXES

7.0. Background

The original IE method of secondary word derivation by means of suffixes seems generally to have consisted of the addition of the morpheme to the stem vowel, and traces of this system can still be found in the ancient stages of the Germanic languages. Necessarily simplified, a typical formation then consists of i) root, ii) stem vowel, and iii) formative suffix. However, the diachronic trend is to render stage ii) more and more optional, so that by the time of formations like Gothic *hauhiþa*, for instance, we can no longer recognise an original Germanic **-þō* morpheme added to a stem; instead *-iþa* has developed into a suffix in its own right. Accordingly this leads further to abstracts like *tulgiþa* from *tulgus* 'firm' which exhibits root formation, the *u*-stem vowel being ignored.¹ On the other hand, it is clear that certain other suffixes still respect the stem vowel, as for instance in the Gothic verbal nouns *þahains* vs. *laiseins* vs. *mitons*. Meid claims that 'eine Folge der Loslösung bindevokalischer Suffixe von verschiedenen vokalischen Stämmen ist die Entstehung von Suffixvarianten mit verschiedenem Bindevokal.'² This is one way to help account for the suffix ablaut like *-al/-ul/-il-* (and similarly for many other suffixes) which we find in all the Germanic languages.

As a result of these developments, matching up presuffixal vowels diachronically or synchronically is a less structured business than with nominal stem vowels. As if this were not enough, an additional factor to be taken into account is the frequent presence of long presuffixal vowels

1. Although in some classes of word-formation, such as with the *-ko/-qo-* suffix, presuffixal **-i-* seems to have spread beyond its bounds already in IE, see §7.2.

2. 1967: §60.

7. Formational suffixes

alongside short. This phenomenon, which can be identified throughout the Indo-European languages, as in Greek πολίτης from πόλις, can be interpreted as morphological or phonological in origin but seems likely to be a mixture of both.³ One further reason for the confusion in Germanic may be related to the fact that it is impossible to distinguish between the reflexes of IE *-ī- and *-ei-. For Gothic *mahts*, *mahteigs* and the like, there is no way on phonological grounds to determine whether the origin of the presuffixal vowel is the functionally lengthened grade suffix *-īga- or the full grade of the stem vowel *-eiga- (cf. §7.2.1). At any event, it seems clear that in late Germanic both long and short presuffixal vowels could exist side by side, although this distinction appears to have been generalised in one or the other direction in certain individual instances.⁴ Identifying length in the inscriptions is therefore difficult, since comparative evidence is frequently unreliable and because long formative syllables, except perhaps for *-ō-, seem to be subject to Norse syncope as much as short ones are. The quantity of the presuffixal vowel will need to be assessed for each individual suffix.

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3. The conventional phonological approach involves positing different ablaut grades in the stem, sometimes due to the use of oblique cases as the base form along with various other measures; cf. Brugmann 1897-1911 II.1:§188, §303 and §379, also §129. On the other hand, Meid 1956:261 criticises this ‘Anwendung mechanistischer oder formalistischer Kriterien’ which he believes ‘sind dem wahren Charakter der Dehnung nicht angemessen. Die Dehnung ist vielmehr ein “expressives” Sprachmittel mit funktionaler Bedeutung, kann als solches daher nicht irgendwelchen “ausnahmslosen” formantischen oder Laut-Gesetzen unterworfen sein, sondern richtet sich nach logisch oder psychologisch bedingten Impulsen.’ His basic argument is that presuffixal lengthening is a device to form specifically exocentric derivations, but admits 1958:16-28 that the theory is based on data from the eastern and more archaic branches of IE like Balto-Slavic, Greek and Indo-Iranian, whereas for the western Celtic and Germanic groups no such distribution pattern can be seen. So, for example, contrary to Meid’s position, in Germanic the lengthened stem vowel in the suffix *-īn- is used for concentric adjectives and diminutives, whereas the sparse traces of the short *-in- substantive suffix appear in exocentric formations like Gothic *kindins*.
 4. In fact, it can only be definitively shown that both long and short variants existed into Germanic in the case of presuffixal *ī*

7.1. The *la*-suffix

Although we cannot expect to be able consistently to match up the vowels in formative suffixes with those in the stem syllables of the base form, an examination reveals that <i> is by far the most common spelling, as might have been expected from the situation reconstructed for IE. Nevertheless, other vowels do also occur in equivalent formative syllables with suffix ablaut.

7.1. *The la*-suffix

The *-la-* suffix is found with all three of what may be considered our basic stem vowels, i.e. <a>, <i> and <u>, and in fact seems to be the *locus classicus* for spotting suffix ablaut between original stem vowels.⁵ Since no comparative evidence suggests any lengthening before this suffix, we will work on the assumption that the presuffixal vowels are short. Within the urnordisch evidence a couple of only tentatively interpreted forms should probably be left out of consideration, namely KJ 58 Årstad **saralu**⁶ and KJ 24 Vimose buckle **asula**.⁷ Encouragingly, the signs elsewhere point to an equivalence between the vowel in urnordisch and that in the later ON reflex, so KJ 27 Kragehul spear-shaft **hagala** and OI *hagall*, KJ 69 Rosseland **agila-** for OI *Egill*. Since most of our evidence is assumed to consist of proper names, it might be expected we would find

5. Meid 1967:§87.

6. Following most recently Høst 1987:159 this is to be understood as a strong feminine form of the ON personal name *Sqrli*. This suffix ablaut grade may be supported by OHG *Saralo*, cf. Förstemann 1900:1299, but it is unclear if this can represent the original state of a first element **sarwa-*, see Braune~Eggers 1987:§64 Anm. 3.

7. Understood by Krause following Marstrander as a diminutive of **ansuz* 'god'; but the problems of word division are so severe in this inscription, leading to the alternative interpretations from, for instance, von Grienberger as presented in Noreen 1923 Anh. 91, Marstrander 1929:84-88 and then 1952:63-72, and Antonsen 99, that this form cannot be credited as reliable.

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the Germanic suffix **-ila-* (alongside rarer **-ula-*) used to form *nomina agentis* and diminutives,⁸ which is a frequent Germanic method of forming hypocoristic names. Accordingly forms do appear along these lines, though to all appearances generally with weak *n*-stem extensions,⁹ as in KJ 56 Veblungsnes **wiwilan**,¹⁰ and rather more obscurely in the bracteate forms KJ 117 Darum 1 **frohila** and the corrupted variants of KJ 118 Skonager 3 **niuwila** and KJ 104 Darum 5 **niujil**. Aside from this patchy evidence there are the several instances of **e-/irilar**.¹¹

A great deal of ink has been issued and staves scratched in debate over the status of these *eril*'s, their position within the runic tradition, and their relation to the Germanic tribe known to continental historians as the *Heruli*.¹² The standard wisdom seems to involve relating the form to OI

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8. See Meid 1967:§87 b:2,4; for the productivity of the *-il-* type, see Torp 1909:§35,2 B.
 9. Cf. the type exemplified by Gothic *Attila*, OE *wædla*; see Kluge 1886:§19, §56.
 10. Possibly to be related to KJ 72 Tune **wiwar**. Although the OHG name *Vivila* noted by Förstemann 1900:1626 has in the past been brought in as support, this is rather derived from roots in **wif-* or **wib-* according to Kaufmann 1968:410-11.
 11. Fairly secure attestations appear to be KJ 16 Bratsberg clasp, KJ 27 Kragehul spear-shaft, KJ 29 Lindholm, KJ 56 Veblungsnes, KJ 69 Rosseland, KJ 70 Järsberg and KJ 71 By. Since for the present purposes the status of the root vowel is irrelevant, I will ignore the question of whether any form (**)irilar* is actually attested, as denied by Antonsen 1968b:629-30, and from now on use **erilar** just for convenience.
 12. See KJ:44 and the other references to **erilar**, **irilar**. DR:646 seems to express a fairly common view that sees the *eril* as a priest, especially given the apparent syntactic parallelism between the **ek erilar** ... inscriptions and KJ 65 Nordhuglo **ek gudija** At any rate we might possibly say that the *eril* was apparently a title for someone whose job frequently included cutting runes, cf. Moltke 1985:105. For a comprehensive discussion, as well as an account of the older research, see von Friesen 1924:45-81, on the actual attested form **erilar** especially 1924:74-81 where he concludes that this is the vernacular Germanic form of the tribal name; but see also the survey in Taylor 1990. It might perhaps be possible to marry the two views together in such a way that **erilar** could represent both an *Erul* and a more general, possibly job, title, if we were to assume that with the tribe's departure from Scandinavian territory the appellative remained in use for one skilled in runes. However, as Moltke notes, the form's appearance in varying times and places

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jarl, but it remains awkward that neither this nor any of the cognate forms such as OE *eorl* or OHG *erl* point to anything other than a proto-form **erlaz*.¹³ Should we end up assuming that the attestations of *erilar* and ON *jarl* are etymologically the same, then the evidence, scanty though it is, seems to suggest that an earlier form **erilar* > **erill* was replaced by **erlar* > *jarl*, though a mechanism for this is difficult to find. If the emendation of KJ 14 Etelhelm *mrla* to **erla* is accepted at face value, then this may already show replacement of the **-il-* suffix ablaut grade by **-l-* in what may be the pre-syncope period.¹⁴ However, since the text needs such emendation, it does not seem too large a step to follow Antonsen 110 in assuming **erila(r)* for the original prototype, and this evidence is too uncertain to decide between the roots **er(i)la-*. On the other hand, an interesting parallel can be gained from a comparison of ON *karl* with the Finnish loan *karilas*; as a tentative stop-gap measure it is possible that specifically in the sequence **-r-ila-* the phonotactic attractiveness of **-r-la-* sometimes led to abnormally early medial syncope.

Nevertheless, from a synchronic viewpoint the structure of the form is clear, as it is attested consistently with a formative <i> which corresponds well to most of the other evidence for this suffix.

throughout Scandinavia suggests that a connection with the tribal name can only be tenuous and etymological at best.

13. See de Vries 1977:290. Von Friesen 1924:75-76,147-48 argues that there is no need to posit a Germanic ablaut grade **erula-* but equally believes 1924:78 that **erila-* and **erla-* must be different formations, since 'rent formellt sett kunna urn. *erilar* och **erlar* naturligtvis vara besläktade med varandra, men släktskapen ligger i så fall mycket långt tillbaka.' The assumption in Lindquist 1924:337 note 3 that '*Erilar* är överallt att läsa *Erlar*; i svarabh.' has little to recommend it, although it is also advocated by Grønvik 1981:202 note 51; but see the comments of Knirk 1984:33, leading to the retraction in Grønvik 1984:70-71. On the other hand, some have tried to identify an ON reflex **erill* in later sources, such as Kock 1921b:§1417 who notes that a form *jærill* (*järill*) appears for regular *jæril(l)* in MS F of the *Östgötalagen*. On the Old Irish witness *erell*, see below §9.5.2.
14. Cf. Grønvik 1981:218-19. According to KJ:40 the clasp can stylistically be dated to around the end of the 5th cum beginning of the 6th centuries.

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7.2. The *ga*-suffix

The *-ga*- suffix is also attested throughout the Germanic languages with suffix ablaut and this state of affairs appears to be reflected in the urnordisch inscriptions. Since with this suffix the *i*-grade can already be seen in IE to be encroaching upon the territory proper to other stem vowels,¹⁵ it is no surprise to find the attestations KJ 58 Årstad **hiwigar**, KJ 69 Rosseland **wagigar** and KJ 88 Møgedal **laipigar** with <i>, all generally and reasonably plausibly interpreted as **-ĭgar* formations, even though there are no good external grounds for proposing an *i*-stem as the base form in any of these examples.¹⁶ On the other hand, the actual length of the vowel in this formative suffix is scarcely to be ascertained from the runic evidence, nor indeed from the post-syncope reflexes. On the basis of comparative forms like Gothic *mahteigs* and OHG *mahtîg* it is often assumed that Germanic had moved towards regularising the lengthened grade in **-ĭg-*. As so often with problems of this nature, we are unfortunately forced to equate the data in Gothic with that posited for proto-Germanic, since none of the other branches can give us equally reliable information; despite this lack of certainty, however, the weight of probability is that the spellings in <-ig> represent **-ĭg-* rather than **-ig-*.¹⁷

15. According to Brugmann 1897-1911 II.1:§376.

16. KJ 88 Møgedal **laipigar** is probably the most transparent example since it looks to be formed from the adjective in ON *leiðr* and so to be cognate with OHG *leidig*, cf. Noreen 1923 Anh. 43, although Antonsen 50 prefers derivation from the *ð*-stem noun seen in ON *leið*. For KJ 69 Rosseland **wagigar**, a possible base appears to the name **Wagar* as attested in KJ 72 Tune *wage*, but this form is impossible to etymologise with any certainty. KJ 58 Årstad **hiwigar** has an excellent IE parallel in Latin *clivus* from *clvis*, cf. Krause 1971:§37.2, although as he notes there is also the possibility of derivation from the root of ON *hy*. At any event, despite the Latin parallel none of these roots can be shown to have been a likely *i*-stem in urnordisch.

17. It is of course equally possible that any of these instances may represent instead the **-inga-* suffix with orthographic omission of the nasal, and despite our best

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Aside from this evidence, there are also attested KJ 29 Lindholm (sa)wilagar and KJ 55 Valsfjord godagas, both of which have been less uncontested as instances of the *ga*-suffix.¹⁸ Syntactic considerations demand a personal name in KJ 29 Lindholm sawilagar, in which case the most plausible two interpretations offered seem to be the reading of Antonsen 17 as *sawilagar ‘sunny’ and von Friesen’s notion of a compound name equivalent to an ON *Sælaugr, which despite its assumed orthographic irregularities seems both intuitively and onomastically extremely plausible.¹⁹ Other approaches where the sequence is divided into two words still usually assume an instance of the *ga*-suffix,²⁰ but overall the problems involved with the plethora of alternative interpretations on offer render this form too uncertain to use as evidence here.

As for KJ 55 Valsfjord godagas, this is frequently interpreted as a secondary formation *Gōðagar derived from the ‘good’ adjective,²¹ although an alternative older view is that the form represents a compound

intentions there is nothing which points unambiguously to *-ġa- here. Unless we are to assume that due to the existence of the *ŋ*-rune, the representation of /-ng-/ by <g> would not be as favoured as, say, that of /-mb-/ by , then we have effectively no control over this data. However, the rather dubious status of the *ŋ*-rune in urnordisch suggests that to rely on a runesmith using it whenever possible is unfounded (see §7.7). Likewise KJ 74 Reistad iuþingar shows that -ng- is a possible digraph for /-ng-/ , and so in principle we might expect *-g- to be possible as a spelling too, perhaps as in the root syllable in KJ 81 Stenstad igijon. There is no way of deciding for certain, although for laipigar and hiwigar at least the cognates may favour reading the *ga*- rather than the *nga*- suffix.

18. I regard the interpretation of KJ 21 Thorsberg shield-boss aisgr as containing a third example of this suffix too unreliable to discuss here.
19. 1924:98; for other such instances where root diphthongs are inexactly represented, see below §8.6.2.
20. As adopted in KJ 29 and DR 261, but Andersen 1956 spells out the phonetic and syntactic difficulties involved with the interpretation *sā wilagar. Alternatively Marstrand 1952:99-108, espec. 1952:106-08, interpreted -lagar as the second element of a compound equivalent to ON lāgr, but this seems onomastically rather unlikely.
21. See Krause 1971:§82,2, Antonsen 29.

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**Gōða-dagar* with early loss of the composition vowel due to haplogy.²² Scholars on both sides tend to bring in as support the name of a moneyer of Æþelræd the second of England, spelt variously *Godeg*, *Godieg* and most frequently *Godæg*, but even though this has mostly been taken as underlying a compounded name *Goddæg*,²³ it does not really seem to provide solid backing to either view. Venås's point that no Germanic adjective **gōðaga-* is attested elsewhere is fair enough,²⁴ but the interpreted corpus of urnordisch forms would shrink dramatically if such a criterion were applied generally, and it seems to be unduly rigid. Venås is forced to adopt this rather strained position to support his theory that no urnordisch vowel grade in *-*ag-* can have been inherited from Germanic, and to this end he endeavours to explain away the runic attestations of -*agar*, as well as argue that ON *heilagr* must be a West Germanic loan word.²⁵

7.2.1. *Venås's theory.* Venås proposes these interpretations to support his theory designed to explain the predominance of the -*ug-* grade in ON, to which there are two main thrusts. In the first place, he tries to demonstrate that this form of the suffix cannot have been the inherited grade specific to *u*-stem nouns as is generally assumed.²⁶ Instead, from instances like Gothic *uhtiugs* 'timely', apparently derived from the *u*-stem underlying *uhtwo*

22. As assumed by Bugge NIÆR I:348 and resurrected by Venås 1971:242-45.

23. From Stephens 1866-1901 III:372, who claims that 'in Old-English the name is spelt both GODDÆG and GODÆG', to Smart in *Syll.* XXVIII:38 and XLI:66. However, I have only found forms attested with a single -*d-*, cf. also Hildebrand 1881:139-40 and Wells 1941-44:86-87,95,104.

24. NE *goody* being plainly a modern creation, likewise German *gütig* from *Güte*.

25. An idea which, despite its advocacy by such authorities as Torp 1909:§40, seems to have little firm external justification.

26. For instance by Torp 1909:§40, Meid 1967:§144 b,1.

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'dawn', Venås identifies a general Germanic principle of word-formation consisting of the addition of the **-ga-* suffix to the full grade of the stem vowel, i.e. IE **-euko-* for the *u*-stems and **-eiko-* for the *i*-stems.²⁷

However, it must be borne in mind that *uhtiugs* is a unique formation within Gothic and has a more frequent variant *uhteigs*, which suggests the possibility that *uhtiugs* may well be no more than a scribal error.²⁸ In addition, the support adduced by Venås from the supposed full-grade of the *i*-stems in formations like Gothic *mahts*, *mahteigs* from **-eiga-* seems to be unjustified, since according to Meid 'eine ebenfalls denkbare idg. Vorform *-eiko-* (mit Vollstufe des *i*-Stammes, vgl. unten *-iuga-* < *-euko-*) ist nicht erweislich.'²⁹ Yet although this principle does not stand up to scrutiny, the vanishing grade formations (as Venås calls them) do indeed not seem to match up with the respective stem vowels as would be supposed. Evidence for the **-ug-* grade of the suffix outside ON is extremely limited, and when it does appear it is not based on *u*-stems.³⁰

Secondly, it is clear that existing explanations for the growing popularity of the *-ug-* suffix within ON are scarcely satisfactory, and derivations from original *u*-stems are not likely to have provided a large enough base to effect such a wide spread. The alternative proposed by Kock, that the dominant *-ug-* grade is a late development extended from those instances where the unaccented syllable in the **-ag-* grade was subject to *u*-umlaut, is more interesting, but here too the analogical base would have been limited.³¹ Having gone through the options, Venås proposes instead that the *-ug-* grade is the regular phonological reflex of IE **-ok-* into Norse, just as Northwest Germanic **-um-* appears to be the

27. 1971:14-16.

28. As noted by Lehmann 1986:374-75.

29. 1967:§144 b,1 (p. 191).

30. Venås 1971:19-24.

31. 1918:26-30.

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standard development of IE **-om-*.³² Since the attested evidence for a presuffixal **-aga-* grade in urnordisch is fairly ambiguous, the question turns perhaps on ON *heilagr*, and here the grounds for recognising a loanword seem rather circular.³³ If *heilagr* is recognised as a genuine Nordic formation exhibiting a regular phonological development in the formative syllable, then we are left again with the possibilities of morphological extension of the *-ug-* grade; and these approaches have so far failed to be convincing.

7.2.2. *Conclusion.* Admittedly the notion of a phonetic rather than an analogical motivation behind the triumph of the *-ug-* grade seems a useful one,³⁴ but due to the uneasiness caused by the fact that as a phonological development it is arbitrary and proposed to account for just one morphological environment, the possibility of the *-ag-* grade appearing in urnordisch as elsewhere in Germanic cannot be ruled out. However, as we have seen, it unfortunately cannot be convincingly demonstrated either.

7.3. The *ðu-*suffix

Tracing the ON *-ðu-* suffix through to the later stages of the language, it is notable that it is generally anomalous in its resistance to syncope,³⁵ and may therefore be assumed to contain a long vowel, which is conclusively backed up by comparative evidence. Interestingly, the possible urnordisch

32. 1971:237-41, an idea already suggested in very vague fashion by Tamm 1899:26.

33. Based simply on the fact that it maintains a vowel grade unique within Old Norse; see the summary of the case in Venås 1971:250-72.

34. And may be strengthened by the observation that the ON composite suffix *-ótt-* from Germanic **-uhta-* < **-ug-ia-* is according to Torp 1909:§41 only attested in ON with this grade, unlike the variation seen in OHG *houbetaht*, OE *stæniht*.

35. As in the ON *fǫgnuðr*, *fagnaðar* type of declension; see Noreen 1923:§394, §397.

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examples of this class of word-formation exhibit fluctuation in both the presuffixal vowel and the consonant, i.e. KJ 66 Vånga **haukoþur** and KJ 67 Noleby **unap(ou)**, **hakupo** but KJ 47 Svarteborg (ss)**igadur** and KJ 130 Trollhättan **lapodu**. Before examining this evidence in detail, it seems worth checking on what this fluctuation might be able to tell us about the class as a whole.

7.3.1. *The status of urnordisch fricatives.* According to the traditional reconstruction, urnordisch inherited from proto-Germanic both a voiced and voiceless fricative series, although this voice distinction had by the time of recorded Old Norse been neutralised non-initially in favour of the voiced alternative.³⁶ There also seems to be some, although not complete, unanimity in the view that the urnordisch inscriptions successfully maintain the original etymological distribution.³⁷ Unfortunately, since this nominal suffix in **-ðu/pu-* seems within Germanic to fluctuate with regard to the voiced status of the medial fricative,³⁸ there is no way, to judge from comparative evidence, to use the status of this fricative to help identify instances of this formative suffix.

7.3.2. *To return.* It seems we must assume that when functioning to form both verbal abstracts and *nomina agentis*, the suffix could have either the form **-pu-* or **-ðu-* in urnordisch, or rather that if either variant was

36. So Moulton 1954:11-12,17-20.

37. Cf. Krause 1971:§21,3. Probably the single piece of evidence most often quoted to question this assumption is the identification of the form KJ 75 Kjølevik **hadulaikar** with the common first element **hapu-** seen in KJ 95 Gummarp, KJ 96 Stentoften and KJ 98 Istaby. That this form originally contained a voiceless fricative is shown by OE *heado-*, and, unwilling to believe in intervocalic voicing so early, Krause 1971:§21,5 and Antonsen 38 are forced to take **hadu-** as a Verner's Law variant. However, as noted by Andersen 1961:55-56, this is rather unsatisfactory and there is no other Germanic evidence which demonstrates the existence of a byform **hadu-*. I prefer to follow Salberger's more pleasing interpretation, which takes the first element as **harðu-* 'hard', see above §4.7.

38. See Meid 1967:§124 and d'Alquen 1988:§7.3 and §8.6.

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generalised in any particular environment, we have no way of recovering that distribution. Taking each of our instances in turn, it is clear that comparatively little trust can be put in them.

Although it is often assumed that KJ 66 Vånga **haukoþur** is derived from the base in ON *haukr*, the idea has comparatively little to recommend it. Even if it is agreed that loss of the medial fricative from **habuka-* could have struck so early, the deverbative origin from an unattested **haukōn* ‘to act like a hawk’ is very strained.³⁹ Unfortunately, the alternatives usually involve derivation from other rather obscure weak *ð*-verbs, as in von Friesen’s reading of **harkoþur** as an agent derivative from ON *harka*, denied as runologically impossible by Marstrander,⁴⁰ and the origin from ON *húka* ‘to crouch’ proposed by Hofmann⁴¹ and adopted by Antonsen 72. None of these is immediately appealing, but at least there seems to be a reasonable consensus that the suffix involved is equivalent to later ON *-uðr*.

The Vånga stone has also led to the identification of KJ 67 Noleby **hakupo** as ‘eine ungenaue Schreibung’ of the same form,⁴² whereas, for example, Antonsen 46 took it to be a dat.sg. of a *u*-stem **hakuðu-*, a name formally equivalent to OE *hacod*, *hæcid* ‘pike’.⁴³ On semantic grounds little can be said in either case, since the form appears isolated within the inscription separated from the initial clause by a string of obscure runes, but on phonological grounds both forms are suspect indeed. Krause’s vague appeal to an approximate representation does not disguise the fact that there

39. As in Krause 1971:§21,8, but cf. von Friesen 1924:39.

40. 1952:215.

41. In Hauck 1970:197.

42. Krause 1971 no. 64.

43. Jóhannesson 1923 no. 41 also interpreted the sequence **hakup-** as ‘pike’, though as the first element of a compound.

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are no grounds for assuming a form **haukðu* here.⁴⁴ As regards Antonen's proposal, the variation in the OE suffix indicates that this word does not contain our agentive **-ðu*- suffix but rather a root extension parallel to that seen in Gothic *haubiþ* and OE *heafod*, and therefore the justification for assuming a *u*-stem is lost. Naturally, other alternatives of varying viability are not hard to find, and perhaps the most pleasing attempt on formal grounds is Grønvik's reading of the sequence as **hā-kunþō* for ON **hákunna*,⁴⁵ even though his proposed translation 'den høye og kjente' is dubious.⁴⁶ However, I would be open to a charge of improper eclecticism in accepting this form whilst being unable to follow Grønvik's interpretation as a whole. Going by the principles concerning the use of runic evidence set out above (§1.2.1), this remains only circumstantial as evidence.

Another pair of doublets may possibly also be identified in the shape of KJ 130 Trollhättan **laþodu** and KJ 130 Anm. Halskov **laþo(p)**. However, the latter form appears on the corrupt Halskov bracteate and may equally well be segmented as **laþo** ... and treated as a feminine *ō*-stem acc.sg. (§6.2), which is the option favoured by Antonsen 108. This leaves us with

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44. It is of course likely that such inexact spellings are more common than we suppose and are rejected too often on the grounds that we think we know how to spell urnordisch better than a typical runesmith did. However, as a methodological point it is clearly not valid to posit interpretations relying on this factor without a decent external reason.
45. 1987:§19.3.4. On formal grounds, it must be admitted that the development **-auh-* to **-āh-* which Grønvik assumes §20,15 for **ha-** is not entirely convincing; see also Elmevik 1980 with place-name evidence brought in as support. However, until the mechanics of deriving ON *hár* from Germanic **hauhar* are more clearly explained, we can only accept that this view of the development is at least possible. Less plausible is Grønvik's attempt to add to the corpus of nominal suffixes in *-ð-* with his reading of Udby **talgida** as an agentive *an*-stem, see above §2.2.1.
46. Carr 1939:41-42 notes that *dvandva* (copulative) compounds of this type are unknown from early Germanic, and it seems likely that any formation of the type proposed by Grønvik would in fact be determinative in nature, i.e. 'known for being noble', cf. the types seen in ON *háværr* 'loud', *nafnkunnr* 'name-known, famous'.

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laþodu alone, but this does seem to be fairly plausibly taken as a posited ON verbal abstract **lǫðuðr* ‘invitation’. Why manufacturers of bracteates put words of this sense on their artefacts may be unclear, but for the proof they did I refer to the numerous instances attested of the precursor of ON *lǫð*.⁴⁷ It is perhaps unfortunate that ON *lǫðuðr* is only evidenced as a *nomen agentis* rather than a *nomen actionis*, although the dividing line between the two can at times be rather thin, and a sense ‘inviter’ might fit here just as well. But overall we seem to have found our second moderately reliable instance of the suffix.

Of the two further possible examples, KJ 67 Noleby **unap(ou)** has been interpreted by a series of scholars as representing the precursor of ON *unað(r)*, but in general this is too uncertain to credit, as the form is surrounded by uninterpreted sequences of runes and even the word division is not certainly established.⁴⁸ Although I find Grønvik’s efforts at interpreting the text as a coherent whole rather difficult to accept,⁴⁹ his arguments for etymologising ON *unað(r)* as **wunēða-* are compelling.⁵⁰ Therefore it seems that in ON *unað* we have a reflex not of the *-ðu-* but rather the *-ða-* suffix formally equivalent to the past participial formation from ON *una* ‘to abide, be content with’. If the sequence **unap-** is relied upon as an early attestation of this form, it may therefore give some indication as to the development of proto-Germanic **-ē-* in unaccented syllables.

47. As above on the fem. *ð*-stem nom.sg., §3.12. For some ideas on the function of this *Formelwort*, see Flowers 1986:253-54.

48. The difficulties inherent in reading this part of the Noleby inscription are brought out by the decision of Antonsen 46 just to give up and the splendid *ættir* games played by Marstrander 1952:207-15,214.

49. 1987:§19.2.

50. See also Torp 1909:§27,3.

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Finally, we have the likely-looking form KJ 47 Svarteborg **ssigadur**, which has most usually been interpreted as representing an original compound **Sigihadur*. Although no convincing account has been given as to why there should be two s-runes at the beginning of the text,⁵¹ more serious objections can be raised against this interpretation concerning the advanced state of the form's decomposition at this early date.⁵² Despite claims that the composition vowel could be lost already in proto-Germanic before a second element beginning with a vowel, **h-* or **w-*, the evidence for such early syncope is scarcely convincing, especially as it seems likely this could merely be a feature of classical authors' transcription practices given the vocalic nature of the segments involved.⁵³ Even if some credence is allowed to the few forms quoted as showing loss, we can compare in return compounds like OHG *tagawerk*⁵⁴ and also runic compounds like KJ 72 Tune **witadahalaiban** and KJ 95 Gummarp **hapuwolafa**.

Düwel proposed instead that KJ 47 Svarteborg **ssigadur** represented a form **Sisigandur*.⁵⁵ If so, it would have been more pleasing to identify an *a*-stem second element as in ON *gandr*, while the first element is even more dubious. The element *Sisi-* admittedly occurs in Gothic names,⁵⁶ and Düwel also draws on OHG *sisu* 'dirge', perhaps earlier 'magic incantation', suggesting that this may be the explanation for DR 193 *sis* which has defied reasonable analysis. However, much of his argument is too strained to be plausible, which applies also to the assumption of the omission of the root vowel **-i-*. It is sufficient to quote Harry Andersen's sympathetic but

51. It is difficult to follow KJ:107 in appealing to number magic.

52. See E. Noreen 1945:146 and Andersen 1961. According to KJ:107, the medallion fits well stylistically in the 5th century.

53. Meid 1967:§22,1 and Carr 1939:272.

54. Regarded by Carr 1939:52 as ancient.

55. 1975:147-57.

56. Köbler 1989:700 marks the numerous attestations with a question mark.

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firm comments, that 'K.D.'s meget lærde, omstændelige og indgående behandling virker ikke overbevisende på mig. Vi er her — som i mange andre tilfælde — ude i noget hvor man hverken kan bevise eller modbevise noget som helst. Man nærmer sig troens område.'⁵⁷

Contrary to these approaches, Antonsen 36 elected to read the two s-runes at the beginning as purely decorative, equating the subsequent reading **igadur** with the name seen in OHG *Inchad*. This then might be analysed as an **-að-/*-ōð-* formation from the **Ing-* root, although it seems more plausible to identify in *Inchad* the second element *-had* 'battle'.⁵⁸ However, as Antonsen noted, the etymology of this form is obscure, and overall we may safely dismiss this inscription as a reliable example of a formative *ðu*-stem.

7.3.3. *Conclusion.* To sum up, there is no evidence for representation of *ðu*-stems by anything other than the variants *-odu-/oþu-*, which tallies excellently with the usual reconstruction in **-ōðu-/*-ōþu-*.

7.4. The *sa*-suffix

The *-sa-* diminutive suffix in Old Norse forms animal and personal names, generally appearing without a formative syllable and declining as a weak *n*-stem.⁵⁹ The only urnordisch attestation of interest is KJ 9 Himlingøje 1 **hariso** which is mirrored in the Erulian name *Hariso*⁶⁰ and even further

57. Düwel 1975:157.

58. See Förstemann 1900:962,788.

59. Jóhannesson 1927:§98,3 and §100,1.

60. See Marstrander 1952:72-74; the form appears in an inscription CIL V 8750 *Flavius Hariso magister primus de numero Erolorum*.

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afield in the formally equivalent Gaulish name *Coriso*.⁶¹ However, even if we are dealing with the same *-sa(n)-* diminutive suffix as can be identified in modern Icelandic, the morphological analysis is still uncertain, since it is unclear whether this form represents a root formation **hari-* plus *-s-* or the addition of an **-is-* suffix.

The traditional wisdom has also been to assume a formative syllable in **-is-* to explain KJ 8 Beuchte **buirso** as a dyslexic spelling for **Bǫrisð*.⁶² However, even if the belief in an original **-is-* formative syllable is justified, it seems possible that this spelling was the one intended by the inscriber. There is sparse but clear evidence in varying periods and places of the runic tradition for the use of digraphs of this nature to represent vowels to whose value no rune corresponded, and this applies also to the earliest attempts of the Germanic peoples to write in the Latin alphabet.⁶³ The possibility remains, therefore, that the root in **buirso** is an attempt to spell something like [y] after syncope of the medial vowel. The direct relevance of this evidence to KJ 9 Himlingøje 1 **hariso** appears limited, however, since it is highly uncertain that the Beuchte text is to be taken as representative of a Scandinavian dialect. Whilst the form of the **j**-rune is reminiscent of that seen on the Fonnås brooch (KJ 17), the **b**-rune rather points south towards the High German areas,⁶⁴ although the fact that similar **b**-runes are attested in Scandinavian inscriptions as well negates this

61. CIL XIII 10010 646.

62. So Antonsen 106 and KJ:28 where it is noted that 'das Suffix *-(i)so* ist uns als Mittel zur Bildung von germanischen Kurznamen aus alter und neuer Zeit wohl-bekannt'.

63. For the apparent parallel in KJ 89 Tanem **mairlþu**, see below §7.7; such tendencies are visible throughout the runic record from all periods, see below §8.6.2. For the manuscript tradition, see for Old English Campbell 1959:§42 and Hogg 1992:§2.18. This practice is not generally attested until quite late in the continental dialects where *i*-umlaut was mostly left unrepresented; for High German sources, see for example Braune ~ Eggers 1987:§51.

64. KJ:28-29.

7. Formational suffixes

point somewhat.⁶⁵ According to Niquet the inscription was found on 'eine silberne, feuervergoldete Relief-Fibel von nordischem Typ. [...] Die Fibel stammt wahrscheinlich aus einer mittelhheinischen Werkstatt. Ich möchte sie in die 2. Hälfte des 6. Jahrhunderts n. Chr. datieren.'⁶⁶ Although useful as a parallel, then, it seems as, if not more, probable that KJ 8 **buirso** is in a West Germanic dialect.

Unfortunately, it is also far from certain that even **hariso** represents this word-formational suffix in *-sa(n)-*, since the hypocoristic function was extended from animal names and many scholars have believed that **hariso** is attested too early to be an example of such an extension.⁶⁷ Among the alternative origins which have been proposed are hypocoristic shortening from compounds consisting of **Harja-* plus second elements beginning with **S-*, or analogical formation from *s*-stems like *agis*, *Agiso*. Although it is difficult to find any grounds to choose between these various possibilities, the parallel forms recorded in epigraphic traditions of similar antiquity to KJ 9 Himlingøje 1 **hariso** suggest that a name of this form was already widespread at this date, whatever its origin.

7.5. The *ja*-suffixes

Although numerous stems and suffixes containing presuffixal vowel plus *-j-* are attested, there seems little to be gained by rigidly splitting them into their various morphological origins. Suffice to say that the vast majority of the attested forms are nominal in function, probable instances being KJ 13a Nøvling **bidawarijar**, KJ 22 Vimose chape **makija**, KJ 25 Vimose plane

65. See Odenstedt 1990:93-94. Although **b**-runes with separated pockets appear on, for instance, KJ 1 Kylvær, KJ 87 Skärkind and KJ 53 Kårstad amongst others, they tend to be rather less separated than the southern form as on KJ 8 Beuchte.

66. 1958:217.

67. See the survey in Hald 1971:54-55.

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talijo, KJ 31 Øvre Stabu **raunijar**, KJ 43 Gallehus **holtijar**, KJ 64 Barmen **pirbijar**, KJ 65 Nordhuglo **gudija**, KJ 72 Tune **arbij(a)-**, **-(a)sijoster**,⁶⁸ **arbijano**, KJ 73 Rø **stainawarijar**, KJ 81 Stenstad **igijon**, KJ 85 Skåäng **harija(n-)**, KJ 91 Tørvika A **ladawarijar**, Illerup lanceheads 1-2 and Vimose lancehead **wagnijo**, and Illerup shield-mount 2 **nipijo**. In addition, in texts showing signs of syncope there are the examples KJ 17a Eikeland **wiwio**, probably also **.asni**, KJ 96 Stentofte **arageu** and KJ 97 Björketorp **arageu**. Aside from these we have just KJ 61 Kalleby **prawijan** which may be either a nominal *jan*-stem or a weak verb class I in the infinitive (§7.13).

From this body of evidence it is clear that there is nothing convincing which suggests any presuffixal vowel other than that spelt <i> in urnordisch. In all respects this would be the expected state of affairs after long syllables where traditional Germanic philology has long recognised that the semi-vowel *j developed a vocalic allophone: the phenomenon known as ‘Sievers’ Law’.⁶⁹ However, notably several of the examples contain a presuffixal vowel after short syllables also, the best examples being KJ 13a Nøvling **bidawarijar**, KJ 61 Kalleby **prawijan**, KJ 65 Nordhuglo **gudija**, KJ 73 Rø **stainawarijar**, KJ 85 Skåäng **harija(n-)**, KJ 91 Tørvika A **ladawarijar** and possibly Illerup shield-mount 2 **nipijo**, whilst semi-vocalic forms are only clearly attested after short syllables in KJ 26 Vimose comb **harja**, KJ 53 Kårstad **aljamarkir** and KJ 73 Rø **swabaharjar**.⁷⁰ Although the distribution is not perfect, it is clear that

68. According at least to majority rule rather than *sijoster*, but note the difficulties with interpretation discussed above in §5.2.

69. For a summary, see Collinge 1985:159-74.

70. Admittedly KJ 32 Dahmsdorf **ranja** for **rann(i)ja* is conventionally interpreted as containing a long root syllable, but the root **ran(n)-* fluctuates between a simplex and a geminate nasal; see de Vries 1977:441 on *rinna* plus references. In addition, if the text is to be taken as representative of an East Germanic dialect as the archaeological picture hints (see KJ:77), then a more reasonable comparison is with Gothic *(*)-rannjan* which might show a similar tendency to delete the original syllabic reflex in pre-vocalic position.

7. Formational suffixes

Sievers' Law has a role to play as a descriptive device for this data, but it remains to be discovered what is responsible for the forms in **-ij-** after short syllables.

From a historical perspective these apparent exceptions are not wholly unexpected, since according to Seebold's study Sievers' Law applies only to long syllables and leaves irregular results after short ones.⁷¹ However, despite frequent arguments to the contrary, all the reliable evidence indicates that in Germanic, unlike apparently Indo-Iranian, the non-syllabic reflex ***-j-** was generalised after short syllables.⁷² Although it is tempting to ascribe great significance to the parallels between Germanic and Vedic Sanskrit, it is probably misleading, and there is clearly much to be said for the conclusion drawn, for example, by Sihler that Sievers' Law is to be seen as a dialectal rather than common Indo-European phenomenon, given that there are persuasive examples showing parallel but independent development.⁷³

I find it more plausible that the distribution of attested forms listed above should reflect urnordisch phenomena rather than inherited IE patterns. Observing that the same roots appear to show both variants in KJ 85 Skääng **harija(n-)** and KJ 26 Vimose comb **harja**, it seems legitimate to posit that the syllabic **-ij-** reflexes after short syllables are in fact examples of svarabhakti vowels. All the classic signs for epenthesis are present with seemingly unmotivated fluctuation with no clear geographical or chronological distribution, and there are numerous parallels within the

71. See for example his statistics 1972:31 on the realisation of Sievers' Law in Vedic Sanskrit and the later presentation of his *Anschlußregel* in 1972:173-74.

72. And so that the so-called 'converse of Sievers' Law' is a valid observation for primitive Germanic. Both Kortlandt 1986b and 1990:3-4, on ON verbs like *segja* without gemination, and Seebold 1972:81,85 on short-rooted formations like *Kvasir* and *greni*, attempt to show that syllabic reflexes could develop after short syllables, but neither case is convincing.

73. 1977:31-32. For instance, Finnish seems to have undergone its own version of Sievers' Law, meaning that Germanic loanwords there have only a very limited value for explaining the Germanic data; see Ritter 1977, espec. §4.

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corpus.⁷⁴ Although admittedly svarabhakti vowels generally appear elsewhere written *-a-*, it does not seem unreasonable to suppose that before the palatal semi-vowel *-i-* would appear instead.⁷⁵ In addition, a typological parallel can be gleaned from Old English, where such epenthesis is frequent and non-syllabic **-j-* comes to be written *-ig-* as in OE *herigas*, the very cognate to the forms quoted above.⁷⁶ Throughout the Indo-European languages it is often difficult to keep apart syllabic and non-syllabic reflexes of **-j-* in postconsonantal position, and so in this respect we are possibly to reckon on a different sort of epenthesis from that seen elsewhere in the urnordisch inscriptions.

We are left therefore with uniform *-i-* after long syllables, exactly as would be anticipated on comparative grounds, and a set of possible parasite vowels after short syllables, which must unfortunately fall outside the scope of this work.

7.6. The *na*-suffix

Of all our morphemes, the *-na-* suffix is particularly useful in that it is extant in several very transparent examples clearly identifiable with later Norse reflexes. The relevant forms are KJ 60 Vetteland *-faikinar*, KJ 61 Kalleby *haitinar*, KJ 67 Noleby *ragina-*, KJ 71 By *arina* and KJ 99

74. See Krause 1971:§53.

75. Only KJ 20 Thorsberg chape *niwajemarix* might give a possible indication that other vowels could appear in such an environment, were we to analyse the first element as **niwVja-* 'new'. With the forerunner of a putative ON **nǫmærr* 'newly-famous, with new-won fame', we gain a fairly plausible epithet for a weapon (or its owner) in a type of word formation well known from Old Norse, see Cleasby-Vigfusson 1957:459-60; but this obviously remains speculation.

76. See Campbell 1959:§365.

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Möjbro *slaginar*,⁷⁷ whilst out of interest we can also note on the post-syncope Eggja stone KJ 101 *skorin*. Although the synchronic status seems clear enough, with all reflexes exhibiting a presuffixal vowel <i>, it seems worth attempting to throw some light on the problems concerning the original form(s) of this suffix.

7.6.1. *The Germanic strong past participle and other formations.* As regards the comparative evidence, it has long been observed that this suffix, used within the Germanic languages as elsewhere for past participial formations amongst other things, appears to have preserved two distinct vowel grades with equivalent function in IE **-en-/-on-* giving Germanic **-in-/-an-*.⁷⁸ Gothic and OHG have mostly generalised the *-an-* variant, although sporadic formations in *-in-* occur like the fossilised Gothic adjective *fulgins* alongside the normal past participle *fulhans*.⁷⁹ The *-in-* form of the suffix is also visible in nominal formations like Gothic *kindins*, but elsewhere in Germanic it is more difficult to trace given its frequent coalescence with, or replacement by, the lengthened grade in **-In-*.⁸⁰ The Ingvaemonic languages give slightly more ambiguous testimony. Whereas the regular ending in Old Saxon *giboran* agrees with the OHG evidence,

77. Where I follow the conventional interpretation of this form as the forerunner of ON *sleginn*, although Elmevik 1978a:84-91 prefers to read the final sequence as *la<i>kkinar* for ON *leikinn*, either 'battle-happy' or 'betrayed' depending upon the precise formation. Since the *g*-rune is smaller than the average height of the runes in the text, it is taken by Elmevik as a double-sided *k*-rune because he thinks the inscription is too excellently executed to permit a malsized *g*-rune. However, the placement of the final *ṛ*-rune above the line, due apparently to misjudging the space required, belies any expertise in the laying-out of the text.

78. See Szemerényi 1990 IX:§6.1.4. A third form can in fact also be identified in the zero grade of the suffix yielding Germanic **-un-* as, for example, in the deverbative *nomen agentis* Ol *jq̄tunn* from *eta*; for the small number of possible further examples see Torp 1909:§23 II:4 and Jóhannesson 1927:§127,1.

79. See Krause 1953:§220,1 Anm. 1.

80. Cf. the reconstruction of Gothic **drauhtins* from the verb *drauhtinōn* in Köbler 1989:121 compared with OHG *truhtin*.

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isolated variants such as *kumin* are also attested, and for Old English and Old Frisian we are left mostly to extrapolate from the presence or absence of *i*-umlaut in the root of the past participle. It is, for example, possible that forms like OE *cymen* (alongside *cumen*) and Old Frisian *estenden* may indicate an original ablaut grade **-in-*.⁸¹ However, the distribution of *i*-umlaut does not seem to be a particularly secure guide within these dialects, since Ingvaemonic tends to level out one umlaut variant or the other throughout the parts of the paradigm with the original zero ablaut grade in the root, and so the historically expected mutation in, for instance, the preterite subjunctive is usually absent.⁸² Forms of direct relevance are necessarily sparse in that they must precede the coalescence of unaccented **æ* and **i* in early Old English,⁸³ but sporadic spellings like *binumini* and *-sleginum* may also attest a proto-Ingvaemonic variant **-in-*.⁸⁴ Similarly nominal formations like OE *ægen*, *āgen* alongside Gothic *aigins* might reflect the two suffixes in competition.

Against this background, it is striking that the Old Norse evidence uniformly shows *-in-* both in the past participle and also the majority of nominal formations. Only in marginal relics like OI *þjóðann* and Old Swedish *bundan* alongside *bundin* does the alternative vowel grade seem to be preserved, although *-an-* does appear more frequently in neuter formations like *gaman*.⁸⁵ In addition the single attestation U 344 *takat* might suggest that the *a*-grade could survive into Viking age Norse in the

81. See Prokosch 1939:§69, although Wessén 1916:83-85 observes that the apparent instances of *i*-umlaut in Old Frisian may well instead be attributed to later secondary developments given the lateness of the relevant texts.

82. Campbell 1959:§736 (m).

83. See Hogg 1992:§6.48-54.

84. So Campbell 1959:§204,8, although Seebold 1967 makes out a case that neither forms in *-in-* nor those apparently showing *i*-umlaut definitely prove an inherited suffix ablaut variant in **-in-*.

85. See Torp 1909:§23 II:3.

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past participle,⁸⁶ and similarly the form U 1040 **futan** for the name *OI Fundinn*.⁸⁷ Nevertheless, the most natural approach would be to assume that Old Norse *-in-* reflects Germanic **-in-*, whilst *-an-* is the reflex of Germanic **-an-*.⁸⁸

Unfortunately, the picture is complicated by the interaction of the unaccented vowel and the various forms of umlaut which appear in the root syllable. It is notable that classes II, IV, and more sporadically III, of ON strong verbs exhibit a lowered root vowel in accordance with vowel harmony, which suggests an original suffix **-an-*, whereas no class in the attested West Norse dialects clearly demands the presence of an original **-in-* suffix. Although sporadic Old Swedish forms show *i*-umlaut,⁸⁹ the ON *-in-* suffix does not generally cause *i*-mutation in the preceding root syllable, and even though past participles of class I strong verbs mostly show no lowering of the root vowel due to vowel harmony, this can be paralleled by the West Germanic situation as in OHG class I *giritan* vs.

86. This form was dismissed by Kock 1898a:499 note 2 as 'wahrscheinlich fehllituzung', and although according to Wessén in SR 7:81 '29 a är fullt säkert', he also concludes SR 7:86 that 'det sannolikaste är emellertid, att *takat* helt enkelt är en tillfällighet, en felaktig ristning för *takit*', and refers to Kock. However, the inscription is convincingly attributed to Asmund Karasun, see Thompson 1975:120, and there is nothing either in the execution of the stone or in Asmund's orthographic habits that would support this view, though naturally the possibility that it is an error remains. An alternative would be to read the form as intended but as a reformed past participle along the lines of Old Swedish *lighat*, but this does not seem very appealing; it is likely that *liggia*, *lighat* has been attracted specifically by the formally similar class 3 weak verb *piggia*, see Noreen 1904:§537,5.

87. If we follow and adapt the interpretation offered by Salberger 1978:39-41. Although the fourth rune cannot unfortunately be read with complete certainty, Wessén in SR 9:291 thinks *-a-* is most likely; on the other hand, I noted above (§5.9) how unreliable was the orthography of the smith of U 1040, Kjüli.

88. This view is favoured by Streitberg 1896:§153,7 (probably) and Gutenbrunner 1951:§159,1. Wessén 1916 argues that the IE sequence **-eno-* developed straight through to urnordisch **-ena-*, but I prefer to follow the usual assumption of a uniform raising of IE **e* to Germanic **i* in unaccented syllables; see below §9.1.

89. See Noreen 1904:§569,1.

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class II *gilogan* despite the apparent domination of the **-an-* variant. It seems in general that lowering by vowel harmony was a more sporadic, almost optional, development with Germanic root **/i/* than with **/u/*. It follows then that it is not necessary to assume that the **-ina-* suffix was already generalised in late Northwest Germanic to explain the lack of vowel harmony in class I forms like ON *riðinn*, while the fairly consistent lack of *i*-umlaut may also indicate that the **-ina-* grade was as yet scarce in this suffix.

7.6.2. *A presuffixal vowel fronted.* Given this, Axel Kock first suggested that the Norse reflex *-in-* could be, and most of the time was, derived phonologically straight from the Germanic **-an-* suffix.⁹⁰ This supplied a morphologically more satisfying arrangement in that it tallied with the apparent dominance of the **-an-* variant elsewhere, but raised some phonological difficulties on the way. Kock proposed that whereas urnordisch **-an* gave ON *-an*, an original sequence **-anC* was fronted to *-inC* as in *bundinn*, *bundi(n)t*, and that this occurred ‘i relativt sen urnord. tid’ to explain why there was no *i*-umlaut.⁹¹ On the other hand, forms like *biinn*, *heitinn* with root **i* or **ai* were assumed to have always had unaccented */i/* due to some form of early Germanic harmonising, where the **-in-* variant was favoured after an */i/* in the preceding root syllable.⁹² To explain spellings like KJ 99 Möjbro *slaginar*, this principle had to be extended so that it operated after the velar consonants **k* and **g* as well.⁹³ Although Kock adduced various parallels for this harmonising in the history of the later Norwegian dialects, their relevance seems uncertain. Similarly,

90. 1898a:484-503.

91. 1921b:§1423.

92. So accounting for the fact that already in urnordisch we find KJ 61 Kalleby *haitinar*; see Kock 1898a:497-98.

93. As Noreen 1923:§136.

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whilst there may be some signs of such a harmonising tendency in those other formative syllables recorded in urnordisch which exhibit suffix ablaut, the evidence is far too sparse to build upon.⁹⁴

For those rare exceptions where *-ann* was retained into Norse, Kock reckoned on levelling from the accusative and other cases where the presuffixal vowel was followed by **-n(-)* or **-nV(-)* and not **-nC-*. In a sense, it is a tribute to Kock's insight and reputation that this on the face of it rather ad hoc and implausible formulation has gained the upper hand in the scholarly consensus, and there is much in it to be sympathetic to.⁹⁵ Yet it must remain a positive embarrassment to Kock's supporters that all the recorded urnordisch forms already show *<-in->*, which appears to remove one of the theory's prime motivating features, namely the absence of any sign of *i*-umlaut in such formations. It is admittedly true that the majority of the attestations fit the criteria for an early development of **-in-*, namely KJ 60 Vetteland **-faikinar**, KJ 61 Kalleby **haitinar**, KJ 67 Noleby **ragina-**, KJ 99 Möjbro **slaginar**, and, if we extend the idea of urnordisch **-in-* replacing **-an-* after palatalised consonants, perhaps also in KJ 71 By **arina**.⁹⁶ Also the signs of the **-in-* suffix in the other Germanic languages do show a faint tendency to follow the same sort of pattern, cf. Gothic *fulgins*, *aigins*, OE *ægen*, *forsleginum*.⁹⁷ Since the distribution of the **-in-* and **-an-* variants can be most easily described

94. See, for instance, the *la-* (§7.1) and *ka-* suffixes (§7.8), where presuffixal **-a-* and **-u-* appear only after a back vowel in the root. On the other hand, if *heilagr* is a genuine Nordic formation, it plainly has not harmonised to **heiligr*, see above §7.2.

95. Cf. the references in Heusler 1931:§114,2 and §354, Brøndum-Nielsen 1950-73 I:§76 Anm. 1, also VIII:§881.

96. The notion of **r* as a palatalised liquid is based on the the usual notion of *r*-mutation; for an alternative view, see Steblin-Kamenskij 1963.

97. But cf. also OE *binumini*, Old Saxon *kumin*, if these are reliable. Wessén 1916:73 attempts to explain this distribution by positing raising of IE **-eno-* to Germanic **-in-* only in the position after palatals, but this fails to account for forms like KJ 61 Kalleby **haitinar**, as he confesses 1916:96.

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with the use of phonological rather than morphological criteria, it seems reasonable to posit some sort of phonetic mechanism at work, a conclusion which is further strengthened by the fact that this **-a-* vs. **-i-* vacillation is mirrored in another morphological ending in an equivalent phonological environment. For North Sea Germanic, at least, it seems we can posit a development of **-an-* to **-in-* in the pronominal ending of the acc.sg. masculine adjective declension. Even though this only seems to apply in actual pronominal forms, it may be no coincidence that it takes place only after an **i* somewhere in the root syllable, and so we find OE *ænne*, with anomalous *i*-umlaut alongside expected *ānne*, and KJ 75 Kjølevik *minino*, both of which suggest a pronominal ending **-inō-* alongside **-anō-*.⁹⁸

7.6.3. *Alternatives.* A phonological case can therefore be made out to explain away the urnordisch instances of *-in-* whilst assuming that this formative suffix was still mostly **-an-* elsewhere and so failed to cause *i*-mutation; but it does not necessarily follow that it should be. At the risk of circularity, there is still something uneasy in positing a distribution of the **-an-* and **-in-* suffixes in urnordisch such that **-in-* should only appear in those instances where the suffix could have no influence due to *i*-umlaut anyway. We are getting a free ride, as it were, without actually explaining how the suffixes came to be used in their own separate environments.⁹⁹ In addition, it seems uncertain that there is any logical gain in assuming two separate stages, first the restriction of **-in-* to those environments after palatal consonants and **i*'s in the root syllable (as

98. Cf. Walde 1900:93-94. Is it also possible that the variation seen in Gothic *þiudans*, *þiudinassus* might be of a similar phonetic origin?

99. Take, for instance, the ON form *sleginn*. The usual rationale for the presence of *i*-umlaut in the root as opposed to examples like *farinn* from the same class is palatal mutation. However, we have in KJ 99 Möjbro *slaginar* clear evidence that *i*-umlaut would be expected anyway since the **-in-* suffix is attested here rather than **-an-*. Therefore we have two posited explanations at hand which can be invoked at will, one of which bleeds the other of input whilst the second renders the first unnecessary. This is a distinctly unsatisfactory position.

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attested in the urnordisch inscriptions), followed by a 'relativt sen urnord.' collapse of the sequences **-anC(-)* and **-inC(-)*. This two-tier development is solely a concession to the fact that the data as we extrapolate it from a) the urnordisch texts and b) the distribution of *i*-umlaut are not mutually compatible with any economy. Yet the phenomenon of *i*-umlaut, as the vast debate throughout the last few decades testifies, exhibits a distinct tendency to resist quantifying and explanation, in fact even description; and one of the most striking features is that certain morphological classes appear wholly to lack mutation where it would be expected.¹⁰⁰ So perhaps the general (though not total) absence of umlauted reflexes in the root syllable of forms with this formative suffix is not a very telling point.

If we take this (un-)reasoning to its extreme, it becomes sensible to ask next if there is any positive motivation for positing a phonological development of **-an-* to **-in-* in any environment. Although there is a possible parallel in the anomalous urnordisch KJ 75 **minino** as opposed to the ON masc. acc.sg. adjectival ending *-an*, this could in fact equally be seen as reflecting two different suffixes, one nominal in **-anð-* as in ON *þann* and one pronominal in **-inð-* as perhaps in ON *hinn*.¹⁰¹ Further, it is difficult to see any other justification for positing such a sound-change, whilst the suffix **-anC(-)* is after all still attested in ON as in OI *aptann*, *þjóðann*, runic Swedish U 344 **takat** (perhaps) and Old Swedish *aptan/-in/-on*. It therefore seems perverse to attempt to explain the **-an/-in-* variation as phonological without taking into account other formative suffixes of similar structure which experience parallel suffix ablaut.¹⁰² An alternative approach might be to suggest that the suffix **-an-* was superseded by the variant **-in-* without any phonological change in the

100. See Bibire 1975:§2 (4).

101. Cf. also Gothic *ina*, urnordisch KJ 50 Strøm **hino** and see Antonsen 38.

102. Noreen 1904:§180 gives evidence for variation in the *-agh-*, *-al-*, *-an-* and *-and-* suffixes, cf. also Torp 1909:§40, §35, §23 II, §26. Further, some of these suffixes which show ablaut also show a marked tendency to replace the *-a-* grade variant with high vowels, see Jóhannesson 1927:§15 and §117.

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status of the presuffixal vowels, and in this way the remnants of the *a*-grade mentioned above could be seen as relic forms. Such morphological arguments were regarded with distaste by Kock, who rightly argued that explaining the vowel harmony and the *-in-* grade in examples like Old Norse *borinn* as due to contamination between putative earlier forms in **borann* and **byrinn* was indefensible on such a large scale as is attested.¹⁰³ However, the morphological case would not have to assume such contamination, but rather the extension of the variant **-in-* which already co-existed with **-an-*.¹⁰⁴ Naturally, if we assume purely morphological confusion, then some feature specific to the **-an-/in-* formative suffix must be discovered to explain the domination of the *-inn* grade. The inadequacies of the theory which favours phonological development can nevertheless be summed up in three main steps.

Firstly, the ablaut in the **-an-/in-* suffix is assumed to have been levelled out mostly in favour of **-an-* in pre-urnordisch. This is necessary to explain the prevalence of lowered vowel harmony variants along with the absence of *i*-umlaut in the root vowel of the various formations. However, this must also apply to the **-In-* suffix forming *Stoffadjektiva* which constitutes a very ancient type of IE word-formation and which is well represented in Germanic.¹⁰⁵ That such forms do not exhibit *i*-umlaut is well-known, cf. OE *gullinn*, and therefore extension of **-an-* on a massive scale is needed.

103. 1898a:486-89.

104. For example, Krause 1971:§81,2b assumes that the **-ina-* grade must have expanded 'auf analogischem Wege' at the expense of **-ana-*. However, this fails to explain the widespread absence of *i*-umlaut, whilst the Germanic evidence as a whole gives a clear picture of the **-an-* grade predominant and **-in-* as a marginal variant. For further points, like the prevalence of ON *-in-* in adjectives, see below §7.6.5.

105. See Meid 1967:§95.

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Secondly, within urnordisch the **-in-* grade is reinstated following the velar consonants **k* and **g* and after roots containing **-i-*. As noted above, this is purely a compromise to explain the domination of *-in-* spellings within the urnordisch inscriptions, and is totally unnecessary within the theoretical development envisaged.

Thirdly, an ad hoc phonetic fronting of **-an-* in various environments is posited such that it coalesces with the **-in-* reflexes.

When set out in such stark terms,¹⁰⁶ it seems that there is little to be said in favour of this approach.

7.6.4. *The status and spread of Old Norse i-umlaut.* The first step in formulating a new approach is to dispel the idea that the reflexes (or otherwise) of *i*-umlaut can automatically be used to induce the nature of the presuffixal vowel. There are clear indications that Nordic *i*-umlaut cannot be seen as giving a single unified pattern, but that rather both dialectal and morphological factors could affect its distribution. Therefore the fact that Old Icelandic *gullinn* and *máttigr* do not show *i*-umlaut does not necessarily preclude our reconstructing **gulþīna-*, **mahtīga-* from proto-Germanic through to transitional Norse,¹⁰⁷ since formative suffixes containing long **-ī-* generally do not cause *i*-umlaut in the root vowel.¹⁰⁸ When, on the other hand, Bibire argues from such instances as OI *elli* and *þyríðr* that umlaut is in fact phonologically regular in such environments, this is to

106. Admittedly the starkness is a trifle unfair, and could be moderated by the use of some qualifiers; these however remain the essentials.

107. To quote two apparently common Germanic forms. Old Swedish *gyllene* is unfortunately irrelevant, being a loan from German, see Hellquist 1948:315. Original formations in *-ig* are not common in East Norse, but the summary in Venås 1971:161-63 has no forms with *i*-umlaut except for those instances where the base also has umlaut; examples like Old Danish *wælbyrthighær* are therefore to be related to the simplex *byrth* rather than West Norse *burðr*.

108. As noted by Kock 1916:108-13.

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conflate, and generalise from, several different types of evidence.¹⁰⁹ He argues from doublets like *þyríðr* alongside *þuríðr* that 'forms which show mutation, unless analogical, must have existed at the time of mutation, and so undergone it. Unmutated forms may therefore be considered as formations, or re-formations, later than mutation.'¹¹⁰ However, an examination of the geographical distribution of such variants shows that alternative approaches are equally viable.

There is some evidence that *i*-umlaut can be viewed as an innovation beginning in the East Norse area and spreading westwards in a wave motion with less rather than greater efficacy.¹¹¹ Most of the best indications for specifically West Norse mutation, such as its presence in the 2nd and 3rd pers.sg. present forms of strong verbs, can be attributed to elimination of root apophony in those East Norse dialects where it is not attested. On the other hand, numerous environments testify to the more widespread development of *i*-umlaut in East Norse. Firstly, there is Pipping's observation that mutation is regular in Old Gutnish even in short syllables before a syncopated short **i*, whereas its absence in such cases elsewhere in the Nordic dialects is exactly the feature which has most helped to fuel the heated scholarly debate on the subject.¹¹² Indications along the same lines are supplied by the variation within the paradigm of old short-rooted *i*-stems, since in Old Swedish we find fluctuation in *stāper* ~ *stāpir* and *Dan(ir)* ~ *Dæn(ir)*, likewise Old Danish *stath* ~ *stæth*, whereas in West Norse the only mutated variants in this class have long roots.¹¹³ In addition, certain formative suffixes appear to leave traces of

109. 1975:§2 (4).

110. 1975:§2 (3).

111. As opposed to Bandle 1973:34-36.

112. See Pipping 1901:95-130, supported along with data from the modern dialects of Gotland by Carlsson's study, summarised 1921:57-60.

113. See Noreen 1904:§409 and 1-3, Brøndum-Nielsen 1950-73 III:§456,1 as opposed to Noreen 1923:§392,1-3. Already Falk 1886:295-97 had suggested that mutation was

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i-umlaut more regularly in East than West Norse, as in Old Swedish *ypin*, *ærin* vs. OI *opinn*, *arinn*,¹¹⁴ and even more clearly Old Danish *kykling*, *drøtning*, Old Swedish *høffinge* alongside OI *kjúklingr*, *drótning*, *hofðingi*.¹¹⁵

Finally, and possibly most tellingly, umlaut in first elements of compounded names, usually when followed by a second element containing /i/, is far more widespread in East Norse sources.¹¹⁶ Whilst we regularly find *Ás*- in Old Icelandic and Old Norwegian texts,¹¹⁷ Old Danish has almost exclusively mutated forms like *Esbiorn*, *Estrith* (alongside the masculine variant *Asfrith*, *Ostrith*), *Esgar*, *Eskil*.¹¹⁸ In the *þór*- element, we find fluctuation in Old Danish forms like *Thorgisl*, *Thurgils*, *Thyrgils* and likewise for *T(h)orkil* and *Thyrger*, but only mutated forms of *Thyr(w)i* appear.¹¹⁹ On the other hand, it seems probable that the West Norse attestations of *Þyri* represent the Old Danish form of the name, whilst mutated variants like Old Norwegian *Þyrgher* and *Þyrgils* are rare, with

present also in West Norse forms like *dynr*, *þytr* in order to explain the frequent confusion between short-rooted *i*- and *ja*-stems, but it is difficult to determine which stem class such instances originally belonged to.

114. Mutation is admittedly only very sporadic before this suffix; for its occasional appearance in the past participle forms in *-inn*, see Noreen 1904:§569,1.
115. In general East Norse variants without *i*-umlaut are also attested.
116. For a survey of most of this data, see Brøndum-Nielsen 1950-73 I:§80.
117. See NID:63-93. The relative frequency of forms like *Eskil*, which are still clearly in the minority, may be partly down to palatal mutation.
118. See DGP:260-79.
119. DGP:1444-47. The form **Thorith* in DGP:1388 is solely a concession to DR 191 þaurihþ which they claim can only represent unmutated **-ð-*. However, not only are both transcription and interpretation of this form uncertain, but DR 42 Jelling þourui for later *Thyr(w)i* suggests that the grounds for reading an unmutated root vowel are doubtful. The other fragmentary Danish evidence suggests later mutated forms in *Tøre*, and it seems likely that the reflexes of OI *Þurðr* and *Þorvé* have fallen together in Old Danish *Thyri*, *Thøri*.

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Þyríðr appearing very occasionally alongside regular *Þuríðr*.¹²⁰ Likewise Old Danish *Ræghnar*, *Regnhild* ~ *Ragnhild* can be compared with OI *Ragnarr*, *Ragnhildr*, where apparently umlaut both from the second element of the compound and from the formative syllable in **Ragin-* must be invoked,¹²¹ and much the same is possibly the case with the *Ar(i)n*-element in Old Danish *Eringisel*, whereas West Norse *Eringísl* appears to be a late Swedish loan.¹²² Other forms often quoted are rather more difficult to evaluate. For instance, the rather rare mutated variant in OI *Hærekr* cannot be compared with East Norse data given that Old Danish *Herik* for *Harik*, *Horik* is just as likely to be a form of *Erik*.¹²³ On the other hand, for *Guð-* alongside *Gunn-* the picture is much the same in all dialects. The only significant mutation is in Old Danish *Gyrith* (alongside *Guthfrith*), Old Swedish *Gyridh* (alongside rarer *Gudhridh*) and Old Norwegian *Gyríðr* alongside *Guðríðr*; however, according to Lind the mutated variant is rare in Iceland.¹²⁴

Finally, the very interesting Old Icelandic form *Hrærekr* alongside compounds in *Hró(ð)-* seems to be the only form where a first element consistently shows mutation in West as well as East Norse.¹²⁵ This name is equivalent to Old Danish *Rørik* (less commonly *Rorik*) and the rare Old Norwegian form *Róðrik*. Although the umlaut is conventionally attributed to

120. This latter form in particular looks to be rather too archaic with its absence of vowel harmony to be a late post-umlaut reformation, cf. *Þo(r)ríðr*.

121. See Brøndum-Nielsen 1950-73 I:§80 Anm. 2.

122. NID:236.

123. DGP:476-77.

124. NID:435.

125. In Old Danish we get variants like *Rothger* vs. *Røthger*, likewise in Old Swedish *Rodhger* and *Rødher*, but in West Norse only forms like *Hróðgeirr* are attested; see NID:578-91.

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the second element in the original compound **Hrōðarīki-*,¹²⁶ several factors indicate that this is not the whole picture. Firstly, it is notable that the OE cognate form *Hrēðric* likewise contains the only mutated first element in the genealogy of the *Skjöldungar* (OE *Scyldingas*). Although there is an OE noun *hreð* alongside *hroðor* to act as a base, the coincidence is striking and might suggest that the distinction between the two sets of forms was inherited. In light of this it might therefore be preferable to assume that *Hrærekr* and *Hrēðric* show the reflex of an alternative first element in **Hrōþi-*.¹²⁷ Secondly, in Viking age and medieval runic inscriptions forms of this name are recorded in ÖG 153 **hrurikr**, SÖ 47 **ryriks**, SÖ 159 **rorikr** and U 413 **rurikr**.¹²⁸ It is notable that the majority of forms have medial *-r-*, apparently the reflex of an earlier cluster **-ðr-*. If we assume that this was a phonetic development when the cluster was simplified, possibly just before following front vowels, then the umlaut in OI *Hrærekr* might be ascribed to *r-* rather than *i*-mutation.¹²⁹ Thirdly, according to

126. See Noreen 1923:§65.

127. As does apparently Blöndal Magnússon 1989:376, although if **Hrōþi-* is the standard form, as he seems to think, then the lack of mutation in OI *Hróarr*, *Hróðný* etc. is awkward to explain. Forms in *Ruodi-* from OHG sources may well confirm this possibility, see Braune~Eggers 1987:§62 Anm. 4, whilst Kaufmann 1968:202 reckons on an *s*-stem at the root of the doublets.

128. A further possible instance is U 934 **ryþikr**, but it seems too uncertain to use here; cf. the alternative interpretations given by Wessén in SR 9.

129. Cf. the comments in §8.3 on the apparent phonetic relationship between *ð* and *r*. This proposal is backed up by other compounds which exhibit simplification of a medial cluster **-ðr-*, see Noreen 1923:§292. As listed in NID:1224-25, only mutated forms appear of ON *þrý(ð)rekr*, and the equivalent development of the medial cluster to *-r-* can be seen in SÖ 163 **þrurikr** and SÖ 211 **þurikr**, presumably for **þrurikr*. It should also be noted that this is not a general development of the element *-ríkr* as can be seen from forms like VG 119 **airikis Eiriks**, U 436 **fryrikr Freyrikr**. In addition, although de Vries 1977:370 derives OI *lýrittr* from the first element *lýð*, the analogy of the Old Swedish form *liuþriti* on the Forsa ring indicates that this too might show *r*-mutation from **ljód-rétr*, cf. Peterson 1989:32. On the other hand, if ÖG 136 Rök **þiaurikr** is correctly interpreted as corresponding to OI *þjóðrekr*, then it may constitute some counter-evidence to a development of **-ðr-* to **-r-*, although not of any particular weight

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Lind the name *Hrærekr* is 'sällan anträffat på västnordiskt område. Från Island blott en *Rærekr* l. *Rodrekr* þræll *Ln* 64, 187, 250⁴¹. Hans nordiska börd torde vara mycket tvivelaktig.'¹³⁰ The form occurs within West Norse almost exclusively for legendary historical characters, and as such the prevalence of mutation might be put down to it being phonologically an East Norse form which moved westward to end up in Old Icelandic sources. I believe too much doubt can be thrown upon Old *Hrærekr* to use it as an argument for regular *i*-umlaut caused by second elements of compounds in West Norse.

If, on the other hand, we assume that in the environments sketched above *i*-umlaut developed regularly in West as in East Norse, and that forms without such mutation are later reformations, then it follows that several different methods of explanation are called for to account for the data. For names in *Æs*- etc. we must reckon that East Norse preserves a distinctly more archaic stratum of nomenclature than in the west. For forms such as East Norse *ypin* we must assume either that the **-an-* grade was less fully levelled in East Norse, or that West Norse again removed mutation analogically; for examples like Old Danish *kykling* vs. Old *kjúklingr* only the second option is open, despite the fact that in such cases the root is scarcely etymologically transparent. Finally, none of these can have any real connection with the phonological regularity of *i*-umlaut in Old Gutnish or the greater frequency of mutated variants in the East Norse *i*-stems. These explanations are of course all perfectly tenable, but it seems more reasonable to argue that, since they all fall into the same category, they give good evidence for the notion that *i*-umlaut as a phonological process is more regular in East Norse.

given that Janzén 1947:93 claims that *Þjóðrekr* 'är säkerligen inte inhemskt, utan lånat av fhty. *Theuderic* o.dyl.'.

130. NID:594-95.

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Therefore I would rather suggest that second elements of compounds and heavy productive suffixes, both of which may be assumed to have had some degree of secondary stress, only sporadically brought about *i*-umlaut, and more frequently in East than West Norse. On the other hand, due to the loss of its athematic flexion prior to urnordisch, the *In*-stem formative syllable can be seen to have adopted the status of a set of inflectional syllables rather than a formative suffix, and so caused *i*-umlaut as in *OI elli*. This is not an attempt to resurrect a theory similar to that proposed by Steblin-Kamenskij whereby the operation of *i*-umlaut might be related to juncture,¹³¹ or at least not directly. A morpheme juncture in forms like *kerling*, *Pyriðr* cannot be argued away.¹³² Nevertheless it is plain that the suffix *-ing* had some degree of secondary accent as well.¹³³

7.6.5. *A compromise solution.* Therefore, at least as regards the *In*-suffix, we have the relative freedom to reconstruct the development of the presuffixal vowel independent of expectations based on *i*-umlaut. If this line of thought is accepted, then a natural way to explain the generalisation of *-in-* over *-an-* in ON becomes apparent: it is due to extension of the **-Ina-* grade. It is a hole in Kock's theoretical phonological development that it does not account for the fact that *-in-* is levelled throughout the adjectives whereas in substantives *-an-*, *-in-* and *-un-* appear side by side.

131. 1959:110-11.

132. As Bibire 1975:§2 (3) validly observes.

133. Kock 1916:103-07. Admittedly, according to this reasoning it might be surprising that the **-inga-* suffix does cause *i*-umlaut in the root syllable fairly frequently whereas **-ina-*, **-iga-*, **-lika-* do not. However this divergence is just as inexplicable according to the alternative morphological view; if, for example, we assume *máttigr* is for expected **mættigr* on the basis of suffix ablaut **-iga-* against **-uga-* or **-aga-*, then why should the suffix ablaut in **-inga-* vs. **-unga-* not have eliminated root apophony in *karl*, *kerling*?

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Torp notes that two different adjectival formations collapse in ON *-inn*, the past passive participial formations and those in **-īna-* which have a 'tilhugs-tyding' and are active in sense.¹³⁴ This, for instance, supplies doublets like OI *leikinn* 'played upon, beset' and 'playful'. As it happens, KJ 60 Vetteland *-faikinar* has been interpreted as a formation of the first type from a putative verb **faikan* 'to threaten' or 'to betray', whereas later adjectival formations are only attested in the second sense 'monstrous', cf. OI *feikn*.¹³⁵ Since the whole of this inscription is not left to us, it is possible that either sense could fit the text, but whatever the interpretation of this individual form, it is clear that these two adjectival suffixes were in existence side by side.

When discussing *bahuvrīhi* compounds above (§3.1.3), it was noted that the various Germanic languages tend morphologically to mutate such formations, and the motive for this seems to have been a desire to make clear formally (i.e. in terms of their inflection) the distinction between the new adjectival and the old substantival function. In early urnordisch, the **-ana-/*-īna-* suffix was in much the same position, in that it formed both substantives and adjectives. I would suggest, therefore, that the more specifically adjectival suffix **-īna-* was adopted by all adjectives in an attempt to mark them off from nouns. We have no way of determining when this might have happened, although prior to *i*-umlaut looks most probable to explain the attested urnordisch forms as well as the general lack of root mutation. This gives a good motive for extension of the *-inn* grade in ON adjectives and is less open to the chronological difficulties noted above with regard to Kock's theory. In particular, it allows us to see all the attested urnordisch forms, which uniformly suggest <ī> as the presuffixal vowel, as representative of a larger trend rather than being anomalous.

134. 1909:§23 II-III. The *Stoffadjektiva* are also of course formed denominally with the **-īna-* suffix.

135. See Marstrander 1945:29-34, Krause 1971 no. 114.

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As for the substantive forms, the majority of those listed by Torp show other grades of the suffix as well as *-in-*, and therefore it is notable that nouns in ON are not tied as rigidly to the *-in-* grade as adjectives are. In addition, as regards KJ 71 By **arina** the lack of both *i-* and *ʀ-*umlaut in OI *arinn* is very difficult to explain,¹³⁶ and this form seems to supply an indication that, on the basis of the ON variants of the *-in-* suffix which did not cause *i*-umlaut, the mutation in the root could be analogically removed or hindered. Of the other examples, *myrginn* does show occasional umlaut alongside *morginn* and *morgunn*, as does the root in the name of the day of the week ON *óðinsdagr*.¹³⁷ But for OI *dróttinn*, too, the parallel of *arinn* gives good grounds for assuming that any putative *i*-umlaut could have been removed on the analogy of its base form *drótt* even had it arisen. On the other hand, it is equally possible that such cases may in fact reflect sporadic extension of **-In-* as a substantive suffix at the expense of **-in-*, in which case, as I have argued, no umlaut would be expected.

7.6.6. *Summing up.* Therefore, if these arguments are accepted, it seems quite likely that the attested forms with *-in-*, especially the adjectives, contain a long presuffixal vowel. It is clear from instances like Old Swedish *ypin* that this replacement of earlier **-in-* by **-In-* may not have always taken place, though it is equally possible that this reflects sporadic *i*-umlaut caused by the long vowel in the suffix. Although then mostly long, at least some of these urnordisch forms, especially possible substantives such as KJ 67 Noleby **ragina-**, may still reflect a short presuffixal vowel.

136. As noted by de Vries 1977:13.

137. See Noreen 1904:§180,3 for Old Swedish *øpinsdagher* alongside *øpansdagher*. The *-in-* grade seems to be attested already on the Ribe skull-piece **upin** if this has been identified correctly as a nom.sg. form.

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The forms of the *-nga*- suffix are partially obscured by the problem of the difficult twenty-second rune $\diamond$. On the sole occasion when the syllable is written out in full, it is attested in KJ 74 Reistad **iupingar** with the vowel <i>, as would not be unexpected from comparative sources.¹³⁸ Since the original reading of the Illerup lanceheads 1-2 as **ojingar** now seems to have fallen by the wayside and been replaced by **wagnijo**,¹³⁹ we will leave that form out of the discussion. Aside from these, as noted above (§7.2) it would presumably also be possible to interpret any of the readings with the *-g*- suffix as *-ng*- suffixes with the well-known runic orthographic principle whereby a nasal could be omitted before a homorganic stop. Although there seems to be no way convincingly to demonstrate the case either one way or the other, there are likewise no particular problems as regards the presuffixal vowel here despite the ambiguity; all reliable possible instances are identified as containing presuffixal *-i*-.¹⁴⁰

The examples of the sparsely evidenced η -rune are more controversial. Possible attestations are the dubious KJ 23 Vimose sheath-mount **awgs**,¹⁴¹ KJ 89 Tanem **mairlŋu**, possibly KJ 76 Opedal **birgngu** and the Slemminge scraper inscription KJ 39 Anm. **witrŋ**,¹⁴² but none of these forms is particularly convincing.¹⁴³ Despite the awkwardness of the situation, a

138. Although Bugge's reading is not uncontested, cf. Antonsen 41 **idringar**, the analysis of the suffix remains probable. In any event, Høst 1977:153 is unconvinced by Antonsen's alternative.

139. See Stoklund 1987:294 and for the recognition of the so-called 'mirror-runes' Pieper 1987, as opposed to Moltke 1985:95-97.

140. On this ambiguity, see KJ:154-55.

141. Usually interpreted as East Germanic if anything, see Marstrander 1952:60-63.

142. On which see Grønvik 1985a:176-77 and the two photographs in Moltke 1985:92-93.

143. See the summary by Barnes 1984:69-74. According to Stoklund 1987:297-98 'only

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quick scan of the evidence seems to reveal that, if any are to be taken seriously, and KJ 89 Tanem **mairlþu** looks to be the least uncertain, then the η -rune, at least in the extended shapes $\P$ and $\mathfrak{P}$, could be used with a phonetic value of the sequence **-Vng-*. This has often been expanded to *-ing-* on the grounds that the extended rune form can be seen as a bind-rune of the *i-* and η -runes, i.e. $\mathfrak{I}$ plus $\diamond$ gives $\P$.¹⁴⁴ A further pointer may also be that since runes appear to have worked on an acrophonic principle, it is possible that the rune could represent a phonetic value [-ing-] on the basis of the rune name **Inguz* or **Ingwaz* as it is reconstructed from the *Ing* of OE tradition.¹⁴⁵ However, if we rely on this notion of the bind-rune then it is all the more difficult to account for KJ 76 Opedal **birnggu** where no vowel is represented in the spelling and the η -rune has something approximating to the form $\diamond$.¹⁴⁶ Consequently Antonsen notes that the rune must have had a marginal status within the futhark, as demonstrated by its use for (at least) two segments, namely /ng/ for [ŋg].¹⁴⁷ However, as the evidence he quotes there shows, within the urnordisch corpus there is no clear sign that the η -rune could in fact have a value /ng/, nor indeed simply that of [ŋ], since as Barnes points out the Opedal inscription is a lot more obscure on this point than most runologists seem to assume.¹⁴⁸

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- shapes without a staff are *certain* examples of *ng'*. Such scepticism seems fairly justified despite the positive results reached by Westergaard 1981:143-53,160-79.
144. Though again Barnes:74-75 notes that it is unclear why such a bound form should then appear on the Grumpan bracteate futhark (KJ 3).
145. See Halsall 1981:146-47, Musset 1965:§§56-62 and §71.
146. Grønvik 1985a:192-93 concludes that only the form $\P$ can be justifiably expanded to <-ing-> given its clear bind-rune nature, and 1985:185-92 brings some slight parallels for simple omission of the vowel in KJ 76 **birnggu**.
147. 1975b:§4.3.
148. 1984:71.

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Whatever the conclusions reached on the question of this rune's forms and functions, they are clearly not likely to provide any useful testimony as to the nature of the presuffixal vowel. The faint picture that can be deduced suggests that this suffix provides evidence only for a presuffixal vowel **-i-*, and on comparative evidence the vowel can clearly be seen to have been short.

7.8. The *ka*-suffix

The *-ka-* formative suffix appears to have functioned, amongst other things, as a diminutive suffix in Germanic used mainly for personal names and animals.¹⁴⁹ In the urnordisch corpus it is only clearly attested once, in KJ 49 Førde **aluko**. Comparative evidence suggests that **-uk-* was a fairly favoured vowel grade for this suffix within Germanic, especially common in Old English but also identifiable in ON formations like *haukr* and the name *Gjúki* from **Gebukan-* as opposed to OE *Gifeca*. An alternative approach might be to attempt to explain **aluko** as based directly on the **alu-* stem attested in the early inscriptions (cf. §3.11), but a more direct parallel for the presuffixal vowel is found in the Ingvaemonic forms OE *Aluca* and OS *Aluco*.¹⁵⁰ It is interesting that Campbell observes that OE formations of the type *bealluc* generally do not exhibit medial syncope, and therefore suggests that the suffix may have originally contained a long vowel, although given the obscure morphological status of an inherited Germanic **-uk-* suffix he wisely does not commit himself as to the nature of this putative vowel.¹⁵¹ Despite its widespread attestation, I can find no way clearly to demonstrate on Gothic or OHG evidence whether the suffix is likely to have had a long vowel at any particular time. However, it may

149. See Jóhannesson 1927:§§67-69 and §72, Torp 1909:§45, Meid 1967:§153.

150. See von Friesen 1924:84.

151. 1959:§351 note 3.

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be noted that in ON the suffix generally shows double syncope as in *maðkr* < **maðukar* (?), cf. ME *maddock*, and that to my knowledge there are no instances of the suffix appearing as a syllabic *-uk-. On an intuitive basis this appears to fit more easily with the notion of an urnordisch short presuffixal vowel, but is not totally reliable as a criterion since such double syncope can also strike at etymological long vowels.¹⁵² We are left therefore with a spelling in <u> which is ambiguous as to length.

7.9. The *sta*-suffix

The substantive *-sta-* suffix is another which in native Scandinavian forms generally appears without a presuffixal vowel, yet here comparative evidence suggests a reconstruction in *-*ista-*. The single example is KJ 96 Stentoft **hagestumr**, an inscription which is not properly speaking urnordisch at all, and further is more usually interpreted as containing the forerunner of the ON dat.pl. *gestum* as the second element of a compound (cf. §3.5). However, I follow Santesson's recent interpretation which prefers to analyse the form as cognate with OE *hengist*,¹⁵³ since this reading not only has archaeological parallels on its side but also results in a satisfying text as opposed to the awkward measures taken by previous commentators to explain the first two lines of the Stentoft inscription. In addition, her interpretation accounts for the distribution of the oral and nasal A-/a-runes in **niuhaborumr niuhagestumr** which was previously dismissed as irrelevant.¹⁵⁴

152. Cf. the loss of long *-f- in ON *heyrr* from **hauzfini-* etc. This loss may be phonologically or morphologically oriented, but either way the same conditions could apply to an original formative *-*ūk-* suffix.

153. 1989:226.

154. See Krause 1971:§32,1. Grønvik 1987:§22.3 claims that the two runes were not yet used to distinguish oral and nasal /a/, the earliest reliable instance being on the Setre comb (KJ 40). However, this explanation has little but coincidence on its

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Having decided then to accept **hagestumr**, we have an attestation of <e> for expected *-i- in a formative syllable. However, this evidence is not of a likeness with most of that quoted above simply by virtue of the fact that it comes from an inscription which is late enough both to exhibit signs of syncope and to approach the end of the elder futhark period. In such transitional inscriptions there are signs that orthographic confusion may already have been beginning, possibly as a preliminary stage in the loss of several runes from the futhark (cf. §9.5.2). Other forms showing this tendency can be found in KJ 96 Stentofte such as **ginoronor** where the o-rune appears twice to represent what we would expect to be /ũ/.¹⁵⁵ The text also apparently uses mid-vowel graphs to represent svarabhakti vowels in **haborumr** (although admittedly only within Santesson's interpretation), **hider-** (cf. §7.12.2) and **hedera-**. In the light of all this we cannot credit the form **hagestumr** alone with supplying evidence for a distinct urnordisch unaccented vowel represented by <e>, but rather it could be seen either as a parasite vowel or as a spelling for expected <i> due to orthographic confusion.

Aside from acting as a nominal suffix, the most common method inherited by urnordisch of forming the superlative degree of adjectives and adverbs consisted of the addition of a morph traditionally reconstructed as *-*ðst(a)*-.¹⁵⁶ Our only apparent attestation is KJ 72 Tune **(a)sijoster**, where

side, since there are no inscriptions where both **ƿ** and ***** are used, at least in stressed syllables, with no regard to the nasality distinction. The use of the **a**-rune for marginal *Sproßvokalen* in KJ 98 Istaby is an interesting phenomenon but restricted to the idiosyncratic orthography of this text. KJ 95 Gummarp shows ambiguity in the sequence **staha þria** where we might expect both final vowels to be nasalised but only one exhibits the **a**-rune. Whether we should invoke *Satzrhythmus*, whereby nasalisation is still represented before a juncture, or rather an early manifestation of the West Norse shift from falling to rising diphthongs in such sequences, is uncertain.

155. See §4.7.1 above. It is of course possible that the stem vowel in **gino-** is a reduced vowel about to be syncope.

156. The substantive suffix *-*(i)sta-* itself is in fact probably a fossilised archaic superlative formation.

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even though both the reading and interpretation are difficult most scholars have identified a superlative adjective (cf. §5.2), and the general lack of syncope in later ON *-ast-* confirms that the vowel here must have been long.

7.10. *The weak preterite id-suffix*

The weak preterite cum passive participial suffix is uniformly spelt <-id->, which is just as would be expected for the reconstruction **-ið-* given that the instances appear to be of class I *ja*-verbs. The forms are KJ 13a Nøvling **talgidai**, KJ 30 Garbølle **tawide**, KJ 43 Gallehus **tawido**, KJ 59 Ellestad **raisidoka**, KJ 60 Vetteland **faihido**, KJ 63 Einang **faihido**, KJ 72 Tune **dalidun**, KJ 73 Rø **satido**, **fahido**, KJ 75 Kjøllevik **hlaiiwido**, KJ 84 Amla **haiwidar** (usually assumed to be a mistake for **h<l>aiwidar**), and Illerup shield-mount 2 **tawide**.¹⁵⁷ The only anomaly as regards the internal consistency of these forms concerns the verb reconstructed as **taujan*, **tawið-*, which appears also to be attested as a weak verb class II in the form KJ 130 **tawo**, possibly a 1st pers.sg. present if reliable, on the Trollhättan bracteate.¹⁵⁸ However, an *ø*-verb from this root is attested in

157. Other examples sometimes posited range from the simply less certain, such as KJ 130 Anm. Halskov **fahide**, down through the very dubious, as in KJ 128 Väsby and Åskatorp **f(a)hidu**, to the wholly unreliable, as in the readings of Antonsen nos. 9 **maridai** (KJ 22 Vimose chape) and 60 **aiwuidai** on the Darum bracteate 3 (see KJ 36); cf. below §8.6.

158. Other proposed instances of this verb in the present tense are even less to be trusted. KJ 129 Over-Hornbæk 2 **t.uui** can, I think, be safely dismissed as any sort of evidence. KJ 67 Noleby **toj-ka** or **toj-eka** has been traditionally interpreted as from the same root as Gothic *taujan* 'do, make', but there are many conflicting etymologies for this root, see Lehmann 1986:342, and even if we match up **toj-** with expected **tauji-*, it is scarcely reasonable to extrapolate the stem class of the verb here, especially as most commentators have tended to divide the form **toj-eka** with the affixed pronoun **eka*. This is even assuming the reading is runologically justified, which seems far from certain; for the rather dubious supposed bind-run **-ek-**, KJ:149 claim that it is 'unsicher, ob eine vom unteren Teil des linken Stabes schräg nach rechts oben bis etwa zur Mitte des rechten Stabes verlaufende Linie nur

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OE *tawian*, so we might possibly assume a parallel North Sea development of a class II weak verb here. In any case, it is the isolated **tawo** that is the difficulty, whereas it is plain that the instances of **tawid-** point to the same *ja*-stem verb as in Gothic and OHG, and for the whole comparative evidence indicates that the presuffixal vowel was short.

7.11. *N-stem nouns*

Two distinct types of *n*-stem inflection can apparently be identified in the urnordisch inscriptions. Firstly, there are the instances of the oblique case ending in **-an**, as in KJ 56 Veblungsnes **wiwilan**, KJ 61 Kalleby **prawijan**,¹⁵⁹ KJ 72 Tune **-halaiban**, **arbijano**, KJ 83 Belland **kepan** and KJ 85 Skåäng **harija(n)**.¹⁶⁰ Secondly, there are less common forms in **-on**, i.e. KJ 69 Rosseland **agilamudon** and KJ 81 Stenstad **igijon**. There appears to have been no recoverable distinction between the *n*-stem gen. and dat.sg. in urnordisch, both forms ending in just the bare stem in ***-n**. Of those attested, at least KJ 56 Veblungsnes **wiwilan** and KJ 81 Stenstad **igijon** can be considered as likely gen.sg. forms, and at least KJ 72 Tune **-halaiban** is probably to be read as a dat.sg.¹⁶¹

ein Riß ist oder die *k*-Komponente der Binderune.' More sceptically Svärdström reckons in VG:93 that it is probably 'kanten av en flagring'.

159. At least as interpreted by Grønvik 1990b:283-91, but cf. below §7.13.

160. The word division which reads **harijan** seems slightly more probable than a posited weak nom.sg. form **harija-**, see above §5.11.2.

161. Only KJ 83 Belland **kepan** is wholly isolated syntactically, and in addition its etymology is obscure. The identification of the form as an oblique *n*-stem is therefore made purely on formal grounds, although the notion of reading a gen.sg. form alone in an inscription has at least an apparent parallel in KJ 82 Saude **wajaradas**, see above §3.3.

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Traditionally the forms in **-an** have been analysed as masculine nouns and those in **-on** as feminine, a conclusion based on comparative evidence.¹⁶² There is however nothing within the texts to suggest that the **-on** forms should be feminine, and likewise there are no pressing reasons to argue the **-an** endings are exclusively masculine. This second assumption is based on the equation of the gen.pl. KJ 72 Tune **arbijano** with the masculine cognates Gothic *arbja*, OHG *erbio*. However, alongside the Germanic *jan-* suffix forming *nomina agentis* there also existed a feminine equivalent *jōn-*, and Gothic, for example, preserves the doublet in *arbja* 'heir' alongside *arbjo* 'heirress'.¹⁶³ When we then consider that **arbijano** appears, at least in some interpretations, to be in apposition to **prijor dohtrir** 'three daughters', it seems equally possible that **arbijano** might actually represent the feminine form of the stem vowel. It is, of course, not out of the question that urnordisch had only the grammatically masculine variant of this formation, which therefore had to be used despite any clash of real gender, but the only grounds for such an assumption are provided by the form KJ 72 Tune **asijoster** which appears to be an adjective governing **arbijano** and therefore should presumably agree in gender. Since this **-er** is more easily reconstructed as a masculine than a feminine nom.pl. ending, scholars have been forced to presume a switch of gender from feminine **dohtrir** to masculine **arbijano**.¹⁶⁴ Whilst such a compromise view may turn out to be unavoidable, it is nevertheless distinctly circular; the text seems more likely to demand feminine endings, and our reconstruction must be very sure of its ground to gainsay this natural conclusion with any conviction.¹⁶⁵ We can conclude that there is

162. Although as can be seen above §5.11.4, scholars have also identified very faint signs in the well-attested *n*-stem nom.sg. ending which point towards **-a-** being a masculine marker.

163. See Meid 1967:§92,2.

164. Cf. Grønvik 1981:80-82.

165. On which see above on **-er**, §5.2.

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only slight internal evidence to assume **-on** vs. **-an** represents gender differentiation. Rather this split is basically reconstructed on the evidence of the Germanic paradigm visible, for instance, in Gothic masc. *hana*, *hanan* vs. fem. *tuggo*, *tuggon*.

Moving on to those examples of posited *n*-stems which have lost the final nasal, the picture becomes even more complicated. The earliest identified instance is probably KJ 17a Eikeland **wiwio** which has generally been interpreted as a *jōn*-stem derivative of the masculine name **Wiwar*, though viable alternatives are available.¹⁶⁶ Further to this, the pair KJ 96 Stentoft and KJ 97 Björketorp **arageu** have sometimes also been analysed as *ōn*-stem endings,¹⁶⁷ but could equally well represent instead the dat.sg. of a *jō*-stem noun, so **ærgju*. Finally there is KJ 97 Björketorp **ronu** for which the best analogue is the ON masculine *n*-stem *runi*, here translated, for instance, ‘sequence’ by Antonsen 120. It seems that if **ronu** has been identified correctly it may have shifted gender, although it might instead reflect a forerunner of NI *runa* ‘sequence (of words, lines)’, which presents less of a clash both formally and semantically; the Finnish loan *runo* ‘poem’ has been traced back by some scholars to just such a proto-Norse feminine weak noun **runō* (cf. §5.9). However, by the time spellings in **-u** appear in transitional inscriptions like this one, we may possibly assume

166. The base form is apparently to be seen in KJ 17a **wir** with loss of the final syllable from the earlier form as in KJ 72 Tune **wiwar**; see Krause 1971:§60,6. However, at the risk of placing too much trust in formulaic parallels, it seems equally likely that we should prefer to analyse **wiwio** as a patronymic formation along the lines of the inscriptions KJ 43 Gallehus, KJ 98 Istaby and possibly also KJ 71 By. A possible approach might then be to take the form as a gen.pl., much as proposed by Antonsen 53, and translate ‘I *Wir* of the descendants of *Wir* carve in the runes for *asni*’, the latter possibly to be linked to OE *Esne* and Gothic *asneis*, see below §5.2. Such an interpretation avoids the awkward necessity of positing a syntactic break in the inscription or of having **wiwio** ... **asni** in apposition while being syntactically divorced from one another, cf. Grønvik 1987:§§11.2.5-11.2.7.

167. As, for instance, by DR:631 and Krause 1971:§28,5.

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instead that we have reached the stage attested in Old Norse where masculine and feminine nouns are clearly differentiated, cf. ON *hani*, *hana* vs. *saga*, *sogu*.

Nevertheless, in the urnordisch inscriptions proper no unambiguous signs of formal differentiation of gender within the *n*-stems are evident, but to be fair the evidence is not copious enough to allow for any distinction to be visible whether it existed or not. So it is necessary to examine instead some of the formal arguments concerning the prehistory of the ON *n*-stem declension.

7.11.1. *The growing differentiation of gender.* In most of the Germanic languages a clear formal distinction is made between the stem syllable in the oblique cases of the masculine and feminine *n*-stems. Having noted above the Gothic evidence, interesting testimony for our purposes is also afforded by the declension of weak nouns in OHG, where the feminine paradigm *zunga*, *zungūn* seems to give a direct parallel to ON *tunga*, *tungu*. Unlike ON, however, OHG also exhibits a high (though short) vowel in the masculine acc.sg. as in *hano*, *hanon/hanun*, whilst at the opposite extreme Old English shows alongside standard OE *hana*, *hanan* and *tunge*, *tungan* only a few sporadic signs in the Northumbrian dialect of an acc.sg. in **-un-*, i.e. fem. *eorþu*, masc. *ġalġu*.¹⁶⁸ Since this supplies a rather confused picture when we come to attempt to reconstruct our proto-Germanic *n*-stem paradigm(s), it is useless as it stands for casting light on the state of affairs in urnordisch. We need to bring some more order into the data, and several popular theories are available for scrutiny which attempt to do just that.

7.11.2. *Apophony in the Indo-European stem.* One recourse is to assume conflicting ablaut grades within the *n*-stem paradigm which could later be levelled out within the dialects in various directions. That such allomorphy

168. See Campbell 1959:§617, Page 1973:150.

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must have existed seems certain, even if attempts to eliminate it can possibly already be identified within late Indo-European.¹⁶⁹ The most natural way, for instance, to explain the split between the masc. acc.sg. in Gothic *hanan*, OHG *hanun* as opposed to the gen.sg. in Gothic *hanin*, OHG *henin* is to assume earlier fluctuation between the IE **-on-/*-en-* grades, and relics of the vanishing grade are also visible in examples like Gothic *auhsne*, OE *oxna*. However, despite this veneer of antiquity playing around with inherited ablaut variants is a risky business, especially when neighbouring languages appear to have had no difficulty in eliminating stem apophony completely.¹⁷⁰ Whilst it may be true that OHG *hanun* represents a more archaic state than OE *hanan*, to build on this to explain the *-un-* form as derived from the IE vanishing grade of the stem **-ŋ-* should be treated with extreme caution as a methodological procedure, especially given that the masculine acc.sg. is generally reconstructed with the full grade.¹⁷¹ The only legacy of an inherited stem apophony which is clearly maintained seems to be the split between the masc. acc.sg. in **-on-* and the gen./dat.sg. in **-en-*, and even that is only attested in Gothic and continental West Germanic. Other divergences, such as the long vowel in the feminine **-ōn-* stems, are likely to be due to Germanic innovations, here for the purpose of dissimilating the masculine and feminine paradigms by extending the stem vowel proper to the fem. *ō*-stems into the formative syllable of the *n*-stems.¹⁷²

169. See Szemerényi 1990 VII:§3.1.

170. Cf. Latin *hominem, hominis*, and the generalisation of the **-en-* stem grade outside the nom.sg. in Balto-Slavic.

171. Cf. Streitberg 1896:§180 A Sg.,2.

172. Although there is a good chance that the variants which were generalised in this way were inherited from IE, cf. the different types attested by Latin *homo, hominis* and *sermo, sermonis*, and see Benediktsson 1968:§2.3, also Wessén 1914:6.

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However, even assuming a Germanic split of **-an-* : **-ōn-* to mark off masculine from feminine does not clear up the picture, for the awkward oblique case forms in OHG *zungūn*, ON *tungu* have long been a thorn in the side of scholarship. Hreinn Benediktsson suggested that the vocalic reflex of the zero grade stem in **-ŋ-* may have been more widespread than is usually supposed, but most of his arguments bordered on the speculative, and he was forced to admit that his distribution of vocalic variants did not follow the Sievers-Edgerton Law upon which the theory depended.¹⁷³ The slight sprinkling of vague signs pointing in this direction which he garnered do not really inspire much confidence in identifying any such reflexes in Germanic,¹⁷⁴ especially when they are attributed such great importance and when 'this *ūn* is nowhere preserved directly in the *n*-stems'.¹⁷⁵ Nor was his proposed contamination of the stem variants **-ōn-* and **-un-* to result in a uniform paradigm in **-ūn-* very convincing, and overall it seems that little explanatory power has so far been gained from those theories which have appealed to inherited Germanic ablaut variation in the *n*-stems.¹⁷⁶

7.11.3. *Raising in Germanic medial syllables.* A widely accepted alternative approach is that the various splits in the *n*-stem paradigms, along with a number of other things, can be put down to phonological developments within Germanic, whereby unaccented vowels were phonetically raised before a high vowel in the following (usually final) syllable.¹⁷⁷ However,

173. 1968:§5.1 and for Germanic §5.34.

174. 1968:§4.1.

175. 1968:§5.34.

176. Note also that the Slavic formations in *-yn(j)i* quoted by Streitberg 1896:§180 B,2 do not indicate an earlier IE proto-ending in **-ūn-* and have no relevance for the history of the *n*-stems. Rather they are due to affixation of **-ni* to stems in **-ā-*, cf. parallel Slavic suffixes such as *-yka* < **-ū-k-*; see Vondrák 1924:551,617.

177. This notion is, for instance, used fairly uncritically in the section below §7.12.1, where it is the basis for assuming a phonological split of Germanic **-er#* to **-ar* but **-eri#* to **-ir(i)*.

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despite the undoubted reality of some instances of such raising in medial syllables, the various Germanic languages show an unfortunate tendency to disagree with one another as regards the various phonological and morphological factors which cause and permit it. The problems involved with this phenomenon are amply shown up by the various incompatible accounts given of it.¹⁷⁸ For instance, it is easy to agree with Hollifield that raising before a high vowel in the following syllable is not a convincing explanation for the variation within the Old English dialects in the comparative and superlative suffixes in *-or/-ar/-ur* and *-ost/-ast/-ust-* and the preterite stem of weak verbs class II in *-ode/-ade/-ude*.¹⁷⁹ It is, however, then still very difficult to specify exactly what factors are responsible for such fluctuation.

Kock had already argued that the Old Swedish verbal paradigm *kallape*, *kallapom* showed that no inherited raising of the sequence **-ōðu-* could be assumed for urnordisch.¹⁸⁰ However, even were this considered a suitable candidate for Northwest Germanic raising (against the position of Hollifield), any putative form *kølluðu* as found in West Norse might be expected to undergo the same removal of 'predictable' *u*-umlaut in East Norse as in other environments.¹⁸¹ It remains a moot point as to how many instances of such raising can be understood as common Northwest Germanic and how many due to specifically Nordic *u*-umlaut; Noreen clearly reckoned that forms like OI *qnnur*, Old Swedish *annor* and OI

178. See the recent survey by Hollifield 1984:31-57 on the possible environments for raising; for much of this data, cf. also van Helten 1910:478-505. On the one hand, Hollifield 1984:30 allows for the possibility that all wholly unaccented high vowels could trigger raising, whereas Campbell 1959:§331,6 believes that for the OE evidence raising of back vowels, at least, is only attested before **u* in the following syllable.

179. 1984:53-60.

180. 1918, in particular the conclusions reached on 1918:24-25; cf. also below §9.1.2 on the reflex of the *u*-umlaut of unaccented **a*.

181. I.e. the failure in East Norse of Kock's 'younger *u*-umlaut'.

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fǫgnuðr, cf. Old Danish *kostnath*, exhibited *u*-umlaut.¹⁸² A definitive resolution of this quandary does not seem to be in sight, but some light may be shed by an examination of those instances where raising has been proposed before a vowel that did not survive into urnordisch, since any such development therefore must belong to the Northwest Germanic period. Unfortunately, for attested Norse this evidence comprises just those endings being dealt with, namely the *n*-stems, along with possibly the *r*-stems;¹⁸³ and since the *r*-stems throughout Germanic appear to show distinct signs of raising in unaccented syllables,¹⁸⁴ it is not unreasonable to suppose much the same development may have taken place in the *n*-stems, even though, unlike for the *n*-stems, we have no evidence available to demonstrate that the final desinential syllables in the *r*-stems had been lost prior to the classical urnordisch stage.

However, the evidence is certainly too complicated to support the unified picture reached by Hollifield.¹⁸⁵ The attested Anglo-Frisian and Nordic languages show almost no signs of raising in the original sequence

182. 1923:§78 and §137 Anm. 3.

183. This question is naturally intimately connected with the equally intractable issue of early Germanic loss of short vowels in final syllables which were separated by at least one other unaccented syllable from the root, i.e. appear in 3rd syllables or later in the word. I believe that a rigidly phonological statement of this loss is misguided; rather such syncope takes place only in strictly defined morphological contexts, specifically in instances of bisyllabic morphemes such as the dat.pl. **-omiz* giving Northwest Germanic **-umz*, but not when directly following from a bisyllabic root. Thus, despite Campbell 1959:§331,3, there is nothing surprising about the retention of the final syllable in a gen.sg. form such as **milukiz*, and to posit analogical restoration on a wide scale is unnecessary. In the *r*- and *n*-stems loss of the final syllable seems to have been regular, unlike in the cases of other word-productive suffixes such as **-ana-/*-ina-* etc. This is probably due to the fact that the *r*- and *n*-stems were already coming to be seen as containing bisyllabic case markers, reinforced by the fact that stem apophony helped to maintain the case and number contrast. This can be compared to the abnormally early shortening of final long vowels in urnordisch bisyllabic morphemes, see above §6.1 and below §8.2.1 and summary §9.4.

184. Hollifield 1984:36-41; cf. also on the *n*-stems Hollifield 1984:42-46, 48-50.

185. 1984:69-70.

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*-*an*- in the masculine *n*-stems, forcing Hollifield to assume that in these dialects the result of raising across medial *-*n*- coalesced again with */*a*/ rather than with */*u*/.¹⁸⁶ On the other hand, it seems possible that *-*ōn*- was regularly raised before a following high vowel in Norse as well as in OHG, thus giving *tungu* and *zungūn*.¹⁸⁷ The runic forms in -*on* are taken by Hollifield to represent a higher variant -*ōn*- as opposed to the -*ōn*- which yielded later ON -*a*, but this means assuming a more complicated unaccented than accented vowel system at this point.¹⁸⁸ In addition, even if it is accepted that the complicated distribution pattern of raising (and its absence) throughout the Germanic languages can be interpreted in purely phonetic terms like this, there are still counter examples. We might, for instance, have expected raising in the ON 2nd pers.sg. present indicative *kallar* from earlier *-*ōzi* and the 3rd pers.pl. present *kalla* from *-*ōnti*, although there are admittedly ways around these since, as the etymological descent of the medial *-*ō*- is possibly from earlier *-*ōje/o*-, it might not have undergone raising at the same time.¹⁸⁹ Nevertheless, since it is apparent that in general the reflexes of putative raising remain extremely disparate, it is scarcely any wonder that certain scholars have taken up other options.

186. 1984:45.

187. 1984:48-50.

188. Cf. Stiles's methodological maxim noted above §2.2.3 which demands that the unaccented vowel system be analysed as a subset of the accented.

189. Cf. Cowgill 1959:5-7. Hollifield 1984:47-48 also suggests that the final *-*i* in the primary verbal endings was lost abnormally early, based on a posited similar development evident in Italic and Celtic; see Cowgill 1975:56-57. However, all the signs are that loss of *-*i*# in third syllables in Germanic is subsequent to raising in medial syllables, whilst a very early loss of final *-*i*# also makes it rather difficult to explain the lack of syncope in forms like Gothic 2nd/3rd pers.sg. present *bairis*, *bairiþ*, according at least to traditional wisdom.

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7.11.4. *Raising due to nasalisation.* According to an alternative view, the correct explanation for the development of the feminine *n*-stems in Norse is from **-ōn* to nasalised **-ō̃* with subsequent raising to *-u*.¹⁹⁰ In similar fashion Kock argued that a sequence **-ōnn* yielded later Norse *-u* as in the oblique gen.sg. *tungu*, but that **-ōn* developed to *-a* giving *kalla*.¹⁹¹ Neither of these seem entirely satisfactory. If raising was only conditioned by a following geminate nasal, then this would imply that ON *tungu*- would be proper only to the gen.sg. and the nom./acc.pl., whereas the acc./dat.sg. would be more expected to develop into **tunga*. Although it is not inconceivable that the forms in **-u*- should have spread at the expense of those in **-a*-, it is not self-evident either. Walde's alternative overrides this by positing raising in all instances of final urnordisch nasalisation, but in doing so runs up against the counter-examples which Kock was so careful to avoid. It seems likely that the normal result of Germanic **-ōn* in Norse is represented by *kalla*, the infinitive being from urnordisch **-ōn* and the 3rd pers.pl. present from **-ōnp*. Therefore the lack of raising would be difficult for Walde and Grønvik to account for, even though an analogical case is available to explain these problematic cases.¹⁹² The assumption of raising due to a high vowel in the following syllable looks on the whole to be preferable, since such an idea is verified by other equivalent phenomena, however sketchily.

190. See for instance Walde 1900:166-67, Grønvik 1976:138 and 1987:§34.4.

191. 1921b:§1866.

192. Both Grønvik 1976:178 note 16 and Walde attribute the lack of raising to analogical levelling from elsewhere, but whereas Grønvik appeals to the parallel of other verbal formations in **(j)an*, Walde prefers to turn to the rest of the class II paradigm where **-ō-* developed regularly to *-a-*. Hollifield 1984:50 note 50 claims that due to its origin in a contracted sequence, the forms of the weak verb class II endings are not compelling. I think it is more economical to assume that in late urnordisch there would have been no difference in either intonation or quality between the final **-ōn* sequences represented by *tungu* and *kalla* simply because one of them was (possibly) the result of a proto-Germanic contraction, and that therefore the discrepancy in development needs to be accounted for.

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7.11.5. *To sum up.* This account has served to show what was already long-suspected; the origin of the ON *tunga*, *tungu* inflexion is riddled with difficulties. Although the general flow of the discussion has mostly been sympathetic to the notion of medial raising before a high vowel in the following syllable, there are admittedly numerous points where this becomes awkward. Attempting to account for the ending in the gen.sg. *tungu*, Noreen wrote that ‘wahrscheinlich liegt hier urgerm. -*ūnz* (ahd. -*ūn*, as. -*un*) vor, dessen *u*-qualität wol aus dem acc. stammt’.¹⁹³ He, along with many others, therefore reckoned on raising of *-*ō*- only before a *-*u*- in the following syllable, and this view still seems the most economical, if not exactly convincing. But if the continental West Germanic dialects are assumed to show the same Northwest Germanic development, then how do we marry together OHG *zungūn* with the evidence of the urnordisch forms like KJ 69 Rosseland *agilamudon*, KJ 81 Stenstad *igijon* and possibly KJ 17a Eikeland *wiwio*? Much the same conclusion with much the same note of uneasiness is reached, although by a different route, by Benediktsson, who also raises the point that presumably something was different about the oblique stem vowel as opposed to the nominative to explain the distribution of vowel harmony variants found in Old Swedish *kona*, *kunu*.¹⁹⁴ The obvious way out, of course, is that there is nothing which indicates the endings in -*o(n)* are in fact grammatically feminine in gender. If the traditional view is adhered to, it could perhaps be argued along with Hollifield that these spellings represent an unaccented phoneme **ǫ*, but this seems to rely on an unexpectedly large number of unaccented phonemes. If we prefer, on the other hand, to see -*an* and -*on* as different spellings of the same ending, then various phonetic and orthographic mechanisms could be proposed to account for the fluctuation. Either way, it seems likely that we have exhausted the capabilities of the evidence to help us in our search for a solution, so the question will be left to the summary chapter.

193. 1923:§137 Anm. 1.

194. 1968:§5.34, cf. Noreen 1904:§163,2.

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Our only attestation of a stem vowel in this class is KJ 76 Opedal **swestar**, traditionally interpreted as a nom.sg. but which according to Patrick Stiles is better taken as a vocative form with a short unaccented **-a-*.¹⁹⁵ On the face of it the form most obviously points to a stem final **-ar* in the *r*-stems;¹⁹⁶ however, this tallies badly with the comparative evidence.

Firstly, the attested Nordic languages exhibit with some uniformity the high, front member of the unaccented vowel triangle *i/e* in the nom.sg. and the high, back unit *u/o* in the oblique singular cases, but never have **a* anywhere,¹⁹⁷ and so the vowel in the unaccented syllable of KJ 76 Opedal **swestar** is in this respect anomalous. Were the form analysed as a vocative, however, any objection along these lines could be accounted for. As discussed above (§7.11.3), one plausible way in which a sequence *-ur* could have arisen in the oblique cases is by Northwest Germanic raising of **-ar-* before a high vowel in the following desinential syllable, but in the vocative case the IE ending in **-e* would probably have been apocopated too early to cause any such raising. As regards the comparison with the later stages of the language, therefore, this attestation raises no real problems from a phonological point of view.¹⁹⁸ Nevertheless, the historical origin of a putative stem-syllable in **-ar-* brings out some interesting problems.

195. Stiles 1984:21-22 as opposed to Krause 1971:§58,12, §98,2; cf. below, §7.12.4.

196. At least in this one case, cf. the vanishing grade in KJ 72 Tune **dohtrix**.

197. See the paradigms in Noreen 1923:§419 and 1904:§437.

198. Brøndum-Nielsen 1950-73 III:§473,1 also argues that nom.sg. forms like *brothar* for expected *-ir* in the *skånsk* MS B69 may reflect an older voc.sg. ON **brōþr*, from Germanic **brōþer*; the same could presumably apply to forms like OI *-fǫðr*, Old Norwegian *fǫþr*. However, if we assume urnordisch nom.sg. by-forms could develop with short vowels extended from the oblique cases, then at syncope there seems no problem in ON forms like **faðr* or **fǫðr* developing.

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7.12.1. *The form KJ 72 Tune after*. If we place absolute faith in our powers of reconstruction, then there is no anomaly within the *r*-stems, since the word for 'sister' is an old IE *-or*-stem and so would have given urnordisch **-ar-* regularly. However, the uniformity of the *r*-stem inflection throughout the Germanic languages suggests that 'sister' did not long maintain its independence from the more usual *-er*-stem formations. If we follow Stiles, then this merger of the two distinct morphological types is all the more plausible if we assume that the Germanic sequences **-er-* and **-or-* coalesced in **-ar-* except in the raising environments **-eri* > **-ir* and **-oru* > **-ur*.¹⁹⁹ Therefore KJ 76 Opedal *swestar* could represent the expected reflex of both proto-Germanic **-or* and **-er*, while the oblique forms in *-ur* of original *-er*-stems like 'father' could be better explained as from earlier **-ar-*. However, the form KJ 72 *Tune after* appears to constitute counter-evidence to this phonological development.²⁰⁰ The idea that the final syllable in *after* could represent a reduced schwa-like vowel about to be syncopated appears to have little to recommend it, since there is no reason to believe that syncope here should differ from that seen in other environments, including in the same inscription the form *wiwar*.

Much has been made of the corresponding preposition in the Istaby inscription KJ 98 *afatr*. As far as we can deduce the spelling conventions in operation from such a short text, the *a*-rune seems to be used here only for vowels which are either epenthetic, as in *hapuwulafir*, *haeruwulafir*, and *warait*, or about to be apocopated, as only in *hariwulafa* where the first *a*-rune is also epenthetic. According to many authorities this form *afatr* reflects the proto-Germanic preposition **after* with syncope of the

199. 1988b:339. This is opposed to the older view that the sequence **-er-* was preserved intact in Germanic, see Streitberg 1896:§65,1 (b), which leads to the uncomfortable positing of a marginal and isolated unaccented vowel **e* in this one environment.

200. See Barnes 1973:366-67. The issue turns also on the problem of syncope in the final sequence **-Vr#*. It seems likely that, contrary to the position of Noreen 1923:§155, vowels in this position were sometimes syncopated, cf. OE *ofr* to Gothic *ubar*; despite Boutkan 1992:19 there is no reason to posit any 'second apocope' in this environment for Norse, whatever the position may have been in Old English.

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final syllable.²⁰¹ If so, the question then arises of why the final consonant is spelt **-r** and not **-r**, where Antonsen claims that ‘the reverse spellings in EN **af^atz** = /aftr/ and **hid^ez**, **haidz**- = /hædr-/ indicate that PG */r/ (originally a uvular trill) and PG */z/ have coalesced in an apical trill after apicals’.²⁰²

7.12.2. *A brief digression: the coalescence of /r/ and /r/ after apicals.* There is however rather little evidence for any such confusion after apicals until a far later period than this.²⁰³ In the first place, even assuming the identification of the forms KJ 96 Stentoft **hider**- and KJ 97 Björketorp **haidr**- with ON *heiðr* is correct,²⁰⁴ this noun has (rather uncertainly) been taken by some as an original *s*-stem in which the representation would be regular as compared to KJ 96 Stentoft **heder^A** for OI *heðra* with original **-r*.²⁰⁵ Aside from this, the continued distinction made between /r/ and /r/

201. For instance Grønvik 1981:217-18 (note 96).

202. 1975b:§5.6.

203. Unless we take it as a purely local change; this exemplifies the dilemma which forces us to assume a uniform reconstructed language where dialectal differences, which must have existed, cannot be taken into account for reasons of method.

204. DR 357, 360 and DR:661 prefer to adopt a word **heiðir* ‘magician, priest’ from Palmér 1930-31:300-04, while von Friesen 1916:12-13 proposes a very strained reading of both sequences as for ON *hitt er* ‘this is’, but apparently only on the formal grounds that **haidra*- ‘bright’ should not be spelt with an **-r**.

205. Krause 1971:§98,1 believes KJ 96 **hider**- is directly from a Germanic *s*-stem **haidiz*, but it is admittedly more usual to take ON *heiðr* as an IE **-tro-* stem and de Vries 1977:217 indicates that on etymological grounds there can be identified an adjectival formation **haidra*- ‘bright’. However, in ON only the noun *heiðr* ‘honour’ has a radical **-r**, whilst the adjective *heiðr* ‘bright’ appears to inflect normally to fem. nom.pl. *heiðar* etc., cf. also n. *heið* ‘brightness of sky’ and see Cleasby ~ Vigfusson 1957:247. Likewise according to Lehmann 1986:168 the equation with cognates like Lithuanian *skaidrus* at least is not exact. A form *hædor* alongside *hādor* is attested in OE, where an *s*-stem formation would be useful to explain the sporadic *i*-umlaut, see Bosworth and Toller 1898:498; the generalisation of the **-or** variant, as in occasional OE *sigor*, rather than the endless form, as in regular OE *sige*, could be put down to the desire to disambiguate the formation from the root *hād*.

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after dentals is one of the conventional criteria for distinguishing particularly old younger futhark inscriptions, and coalescence in this position is usually dated to around the 9th century.²⁰⁶ Of course, in defence of Antonsen's position it could be argued that KJ 98 Istaby **afatr**, and also KJ 96 Stentoften **hider** – if we follow the **-tra-* etymology, merely indicate a phonological coalescence whereby the sequences **-tr* and **-tr* (and similarly for other apicals) first collapsed in a phonetic sequence which resembled /tr/ but later developed to be identified with /tr/, whilst the opposition between etymological **-tr* and **-tr* was neutralised all the while. Due to the limited amount of evidence of sufficient age, it is difficult to find conclusive counter-examples, but some few forms can be adduced where the sequence dental plus original **-r(-)* seems to have been preserved intact;²⁰⁷ and even if there were no such confirmation, this position still seems too twisted to inspire any confidence. This is especially valid given that we have a preferable way to explain **afatr**, which is that it shows coalescence of **r* and **_R* after unaccented front vowels, a collapse already attested, for instance, in ÖG 136 Rök **fapir**, (...)ftir.²⁰⁸ On the other hand, it does apparently entail assuming that a proto-form **aftar*

206. See DR:970,1021, Brøndum-Nielsen 1950-73 II:§279, Noreen 1904:§283,1. So, for example, the Rök inscription ÖG 136 still successfully maintains the etymological distribution in **fatlapr**, **nirupr**, **histr** as opposed to **uintur(a)**, as does VG 119 Sparlösa **sunr** alongside **sikmar**. Even in West Norse texts **-_R* is maintained into Viking age inscriptions like Niy 2 **stotr**, although on the Elisenhof comb we apparently find coalescence already in post-consonantal position in **kobr**, dated to the late ninth century in Moltke 1985:370.

207. Such as ÖG 136 Rök **uintur(a)**, assuming this is a secondary epenthetic vowel, and **bruprum**. A further example is ÖG 8 Kälvesten **austr** where the antiquity of the inscription seems assured by the continued presence of the stem vowel in acc.sg. **sunu**, even though unfortunately no clear instance of original dental + **-_R* occurs; for ÖG 8 **mir** for Old Swedish *mæpr*, cf. Noreen 1904:§244,4 and above §7.6.4. Of possible relevance also are the forms **uifrpur** *Véfrøðr* and **kul finr** *Kolfinnr* in the Malt stone inscription alongside **fauþr**, assuming that these names are correctly interpreted, see Grønvik 1992:§8.4 and §9.1, and that the last form is not an inaccurate spelling for **fapur* or **fauþur*.

208. This is the position envisaged by DR:970 and Brøndum-Nielsen 1950-73 II:§279.

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could lead to palatalisation of the final **-r*, which is not an ideal situation, and therefore it seems best to accept Grønvik's view that the short form **æft_R* is analogical from the longer variant **æftir* which expectedly shows this palatalisation.²⁰⁹

7.12.3. *Adverb or preposition?* What then is the status of the various recorded forms such as KJ 72 Tune **after**, KJ 98 Istaby **afatr** and the numerous later Viking age reflexes such as runic **aft**, **at**, **aft_R**, **aftir**, manuscript WN *aptr*, *ept*, *eptir*, EN *atter*, *apter*, *æptir* etc.? On the rather slender basis of the OHG prepositional formations like *ubar*, *ubir* as opposed to the adverbial *ubari*, *ubiri* we can recognise at least a possible basis for extending an opposition within Germanic of preposition = **-er* : adverb = **-eri*. This is the case argued by Grønvik who claims that the **aft**-like forms are the regular reflexes of the original Germanic preposition **after*, represented in KJ 72 Tune **after** and KJ 98 Istaby **afatr**, whereas later **aftir**, ON *eptir*, is originally the adverbial formation in Germanic **afteri*.²¹⁰

It remains however a moot point as to whether all these forms, even the apparently endless ones, are to be derived from the originally comparative formation **af-t(e)r-* by phonological loss, or whether we might perhaps posit an original **aftē* as in Gothic *afta*.²¹¹ The first alternative looks to be the best, despite the phonological difficulties involved, given

209. 1981:218.

210. 1981:217, cf. also DR:741-44, von Friesen 1920:29 and Johnsen 1968:54. The predominance of the shorter forms in **aft** in the earlier Viking age inscriptions is quite striking, and the original distribution of adverb and preposition can to all appearances still be picked out in DR 192 and ÖG 136. According to Jónsson 1901:122-23 the longer form *eptir* may in fact have begun the transition from adverb to preposition as a postposition. However, it seems to have started its career as a preposition long before his proposed date of the mid-12th century, given the evidence of the 10th century Isle of Man runic inscriptions, e.g. Andreas-2 with **aftir**.

211. See Lehmann 1986:7-8; even assuming this one attestation is not considered sufficiently reliable, the derivative *aftana* looks likely to confirm the formation.

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the early appearance of KJ 72 Tune **after** and KJ 98 Istaby **afatr** specifically as prepositions. If these two forms are assumed to be equivalent to ON *eftir*, then it becomes rather awkward to explain the clear picture of the evidence from the early Viking age inscriptions which suggests **afti/æft* was the preposition, **æftir* the adverb. On the other hand, it is possible to assume that this split is secondary within Norse. Von Friesen suggested that both forms were to be derived from urnordisch **after* dependent upon the level of sentence stress,²¹² but under this view it is difficult to account for the presence of *i*-umlaut in the root vowel which leads rather to a natural reconstruction **aftir(i)*. Unfortunately, the position we have reached does involve a rather ad hoc assimilation of **aftir* to Viking age **aft**, ON *apt*; it is possible that the obvious parallelism with other pairs like *of*~*yfir* or *for*~*fyrir* may have helped influenced the matter.

7.12.4. *A verdict of insufficient evidence.* Formal arguments suggest then that KJ 72 Tune **after** should represent a preposition **aftar* and not the originally adverbial formation **aftiri*, but there is no clear way of explaining the fact that the putative final sequence **-ar* is spelt two different ways in KJ 72 Tune **after** and KJ 76 Opedal **swestar**.

The case naturally must depend partly on the analysis of the final syllable of **swestar**, which in turn depends upon the identification of its syntactic function. Therefore it is time to examine the more traditional view in which **swestar** is seen as the direct progenitor of ON *sysfir*, at least as far as the unaccented syllable is concerned, and with it Stiles's arguments that it instead represents a formally distinct vocative case, which so far have been accepted for the sake of argument.

7.12.5. *The problem of the a-rune again.* Antonsen dismisses Stiles's proposed interpretation of KJ 76 Opedal **swestar** as implausible since he

212. 1916:31.

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sees no reason for a vocative form to appear in such an inscription.²¹³ The grounds for identifying distinctly vocative forms in urnordisch inscriptions were weighed up above (§3.14.2), but unfortunately without managing to reach any clear conclusion. For the Opedal inscription itself, interpretations involving the use of a vocative case certainly seem possible enough without being self-evident.

However, Stiles's main arguments in rejecting the conventional analysis of **swestar** are purely formal and as such run the risk of circularity. If we follow the more intuitively natural equation with the ON nom.sg. form *systir*, we run up against the problem of the multi-faceted **a**-rune again. As I noted above (§5.11.6), the traditional view that **-a-** could represent both a short **a* and a long **æ* has now fallen into general disfavour. Nevertheless, although I agreed that the criticisms levelled against this expedient as regards the masculine *n*-stem nom.sg. were valid enough, I suggested also that the new orthodoxy was just as inflexible and fallible as the old. This sense of uneasiness has been confirmed by new finds which apparently provide instances of <**a**> and also <**ai**> representing the reflex of Germanic **ē*¹ in unaccented syllables (cf. §8.6.1). Therefore the time has come to re-open the discussion as to the range of phonetic values carried by the **a**-rune.²¹⁴

If we assume **swestar** exhibits the reflex of a Germanic ending **-ēr* and is in fact the direct ancestor of later ON *-ir*, then the question begs itself as to why the straightforward expected spelling in **-er* is not encountered. In the first place, I would point to Udby **talgida** to support the notion that it is distinctly possible for unaccented **-æ-* to be represented by **-a-**.²¹⁵ Secondly, an approach to the problem is supplied by

213. 1987:23-24. His other point that 'the argumentation is unconvincing, since it rests on a proposed vocative which does not differ in form from a nominative' is scarcely telling given that Stiles explicitly argues for a voc.sg. form **swestar* as opposed to a distinct nom.sg. **swestēr*.

214. As suggested by Stoklund 1991:§8.

215. Or, if preferred, unaccented **-ē-*. The terminology here will be left deliberately

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the very form KJ 72 Tune **after**, which gives us a way of treating both problems at once. In **after** we find the exact opposite of the situation in **swestar**, namely a spelling in **-er** where we would expect ***-ar**. The common link seems to be the final liquid.

I would therefore propose an allophonic confusion of the reflexes of **a* and **ē* in the position before final **-r#*.²¹⁶ The fact that this is derived straight from the evidence, and, what is more, evidence that has until now defied satisfactory explanation, will, I hope, counter the charge that it is admittedly rather ad hoc. In a sense, this coincides with the traditional position of Germanicists that primitive Germanic **e* only avoided being raised to **i* in the position before **-r* where it was retained, but the agreement is only superficial.²¹⁷ The use of the graph <a> for urnordisch **æ*, on the other hand, seems likely to have been prompted by the identification of this long vowel with **a*, at least in this environment. The assumption that the identification of unaccented **a* and **æ* was facilitated before **-r#* by some low-level phonetic rule helps to account for the attested forms; but are there any external grounds for it?

Numerous parallels for abnormal vowel development before *-r-* could be pointed out, but their value seems unfortunately to be fairly negligible. So, for instance, even if we assume a regular development of **-er-* to **-ar-* in Germanic unaccented syllables, there is *something* which needs to be accounted for to explain why *-er* reflexes are so prevalent throughout the West Germanic languages.²¹⁸ A possible view might be that within

vague and discussions concerning the phonemic nature of these developments, and the (lack of) correspondence between the long and short subsystems, will be left to the summary chapter below, §9.2.

216. Although it appears I have been pre-empted in this proposal by Gunnel Clark, see Stiles 1984:38-39 (note 16), the new evidence that has come to light since then supplies supporting evidence for the view.

217. This still seems to be the position passed down in the handbooks, see recently, for instance, Hogg 1992:§3.30.

218. As also on the Tune stone inscription. After all, recognition of this difference is

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Germanic the phonetic value of the sequence remained something like [-æ-], but that since all other instances of *-e- had coalesced with *-i-, the phonological equation switched and [-æ-] was re-analysed as the phonetic reflex of underlying /-ar-/ rather than /-er-/ or /-ir-/.²¹⁹

Likewise ON manuscript evidence indicates that final -r could have a distinct phonetic effect upon a preceding vowel, and although we find varying results the common factor seems to be the appearance of low-front allophones in this position. Lindblad notes that the Codex Regius along with many other Old Icelandic texts has a higher percentage of <e> spellings for unaccented *i~*e in the final sequence -er than elsewhere.²²⁰ Hänninger notes a similar phenomenon in AM 28 8° of the *skånske lov*, where after /æ/ in the root the distribution of unaccented <e, æ> vs. <i> depends upon whether the final syllable is closed or open, and etymological *-ir# appears as -ær more often than it statistically should.²²¹ More such data could be quoted were it necessary or desirable. I will not indulge here in the quasi-phonetic game of trying to specify an articulatory reason for this, since although plenty might be suggested none would be verifiable. I will merely observe the existence of such phenomena for what they are worth, and note that confusion of *a and *e before *-r# seems to

218. what led to the awkward theory that Germanic unaccented *-e- was only retained as such in this sequence in the first place.

219. And accordingly the local rule also changed, to specifying a more front variant before *r from underlying /-ar-/ rather than a lower one from */-er-/.

220. 1954:164. This might be related to a slightly lower allophone in this position, but as Lindblad is aware, caution needs to be exercised in that the frequent use of the -er abbreviation mark for inflectional syllables may give a bias to the evidence.

221. 1917:161-62, although again this is not unambiguous, and Hänninger prefers to interpret the data as reflecting analogical extension of verbal endings in -ær from ON -r; while this is fair enough, forms like *æfiær* for *æfiir* still appear to show some phonetic effect at work. As a whole, this data is probably to be seen as just part of the general pattern where final syllables in -Vr# are often not counted as fully closed syllables as regards the distribution of unaccented vowel variants.

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have a long and distinguished pedigree.²²²

I am aware that the analysis proposed here is only an alternative to Stiles's view, and that it is perfectly viable to view *swestar* as a voc.sg. form and ignore these arguments. However, I believe that the new find of the Udby fibula referred to above gives a new weighting to the body of evidence. There is still no clearly identified instance of a formally distinct vocative case in the urnordisch inscriptions, whilst we do have evidence that the *a*-rune is not as tied to one phoneme as we might like to believe. The phonological implications of this approach will be worked out in the summary (§9.2).

7.13. *The verbal infinitive*

Only one urnordisch form can be ascribed to this class, and that only with uncertainty, since although some scholars have argued that KJ 61 Kalleby *þrawijan* should be taken as a verbal infinitive, specifically the antecedent of ON *þreyja* 'to long for, yearn',²²³ none of the interpretations offered so far for the whole text have gained a consensus.²²⁴ The translation in KJ that 'sich zurückzusehnen (nach dem Grabe) war er (der etwaige Wiedergänger) geheißē' seems too strained to put faith in,²²⁵ while von

222. Although actually the use of such manuscript evidence suffers from yet another qualification in that most of the instances of final *-Vr#* are in fact from older **-Vr#*, and are therefore of even less relevance to the question of urnordisch **-ar*, **-ər*.

223. For example von Friesen 1924:129-35 and KJ:139-40 (derived from Nordén).

224. While Grønvik 1990b:281-82 has some cogent criticisms of such attempts to identify an infinitive plus accusative construction in an urnordisch inscription.

225. The ON sense of the verb 'to be patient, endure' might have fitted better into this vision of the formula than 'to long, yearn', cf. Cleasby ~ Vigfusson 1957:745. However, from an examination of other dictionaries such as Lex.:646 and Fritzner 1883-96:1035, it appears possible that this meaning has been extrapolated from modern Icelandic and is unlikely to have appeared in an urnordisch inscription.

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Friesen's interpretation similarly leaves too much to the imagination of the putative reader.²²⁶ The usage of a preterite verb **was** in the indicative also seems to raise problems with these approaches. If KJ 61 Kalleby **prawijan** is actually to be taken as an infinitive, then the precise sense intended still remains obscure, possibly not helped by the fact that according at least to some authorities the inscription is not necessarily complete.²²⁷

7.13.1. *The historical picture.* If, however, for the sake of argument, we allow that this form represents an infinitive, then how does it fit in with other evidence? According to the standard reconstruction the Germanic infinitive is derived from an older IE verbal noun in **-onom*, possibly the neuter substantivisation of the **-ono-/*-eno-* suffix used in Germanic to form the past passive participle of strong verbs.²²⁸ No Germanic language, however, exhibits any sign of the original final syllable, and if KJ 61 Kalleby **prawijan** were to be considered reliable it would constitute evidence that **a* was lost in 3rd syllables (or further from the root) already before the classical urnordisch stage (cf. §9.4). This supposition is confirmed by the uniform loss of **-n* in the infinitive throughout the Scandinavian languages, which appears generally to have taken place only when the nasal was in absolute finality already in urnordisch.²²⁹

226. 1924:134. Comparing the sporadically attested sense of Old Swedish *thrā* as 'to pine away', he proposes a *förbannelseformel* along the lines that '(he who damages the stone) is called upon to wither away'. However, the wording is rather too vague and ambiguous to have been of much use as a warning, even though he tries to work around the problem with the disclaimer that 'vem förbannelsen var riktad mot var så självklart att ristaren antingen icke ansåg sig behöva eller icke tänkte på att ange det'.

227. See Marstrander 1952:197-200 based on Boije's examination in 1883. Unfortunately, Boije was not able to reach any definite conclusions regarding the part of the stone where the inscription breaks off, leaving Marstrander free to supply further runes for his interpretation in 1952:202-03, whilst KJ:139 and Grønvik 1990b:274-75 prefer to assume that the inscription is fully preserved.

228. Cf. Bammesberger 1986:§15.2 and Szemerényi 1990 IX:§6.2 plus note 15.

229. Thus loss is regular in the oblique singular cases of *n*-stems, but in the neuter pl.

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7.13.2. *To conclude.* Aside from this, if we follow Grønvik's interpretation of the Setre comb then KJ 40 **naa**, **nana** represent the two ON infinitives *ná* and *nenna* respectively.²³⁰ However, as it stands the text is post-syncope and so rather fits into the section on transitional inscriptions (§9.5.1). This leaves us with **prawijan** which, if interpreted as an infinitive, confirms the standard reconstruction in **-an*.

7.14. The verbal present participle

Only KJ 72 Tune **witada-** gives us urnordisch evidence for this formation, and even this apparently represents an archaic and specialised usage of the present participle as the first element of a *bahuvrīhi* compound.²³¹ The structure of the suffix is clear enough, appearing in the Germanic languages in general as *-nd-* affixed to the stem vowel. Therefore an equation with ON *vitand-* seems on the face of it perfectly straightforward, but in fact there are two rather difficult questions to be addressed regarding the formal development of this suffix, one specific to this particular class of weak verb formation, the other general to the present participle as a whole.

as in OI *augu*, Old Swedish *øghun* it is only proper to West Norse due to the fact (presumably) that the inherited urnordisch ending was still something like **-ōnu*. In similar fashion, the masculine acc.sg. adjectival ending in ON *-an* shows no loss of the final nasal, where comparative evidence suggests final apocope was independent within the various languages, cf. OE *-ne* and above §6.1. According to Kock 1891:244-48 a nasal that became final at Norse syncope was retained if it followed a short vowel, but if it followed a long vowel as in *augu* and the 3rd pers.pl. subjunctives *heyri*, *heyrdi* then it was lost in West Norse.

230. 1987: §§1-4.

231. I assume a present participle here rather than a first element similar in formation to Gothic *witōþ* 'law', see Lehmann 1986:407, since Bugge's early proposals along the lines of **witrēða-* as in NLæR I:17 have now fallen out of favour. The parallels with the compound types listed above in §4.7 seem to be convincing enough to allow us to identify the precursor of *vitand-* here.

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7.14.1. *The fate of the stem vowel.* Since, to judge from the Gothic preterite *witaida*, the OHG infinitive *giwizzēn*, and the ON past participle *vitadr*, Germanic **witē-* 'to observe, watch' appears to have been a class III *ē*-stem verb, many scholars have taken *witada-* to represent an inherited form **witēnd-*, usually with shortening of **-ēnd-* to **-and-*.²³² However, it is uncertain that shortening of **-ē-* could be responsible here,²³³ and the question seems closely related to the problem of how the class III **ai/a* stem apophony visible in Gothic and Old Norse is thought to have arisen.²³⁴ It seems reasonable to suppose that the apparent regularity of the stem vowel in the OHG weak inflectional pattern is secondary,²³⁵ and that we should not therefore necessarily assume a stem vowel in **-ē-* or **-ai-* running throughout the Germanic paradigm without variation. Certainly one possible way to explain the extension of the stem vowel *-a-* in certain endings of the Gothic and ON conjugation might be to assume that this reflex regularly developed from Germanic **-a-* in the infinite forms *haban*, *habands*.²³⁶ It seems especially likely that we might find a standard thematic vowel **-a-* (from IE **-o-*) in the case of *witada-*, since here we are dealing with a particularly archaic and marginal method of nominal compounding, and there are clear relic signs within Germanic of the **-and-* suffix not containing the present stem vowel of the base verb in nominal

232. So Krause 1971:§14,1.

233. See, for example, Flasdieck 1935:§54 a,2.

234. As compared to the **ai/ja* apophony apparent in West Germanic; see the survey in Jasanoff 1978:§§52-56, and cf. also Dishington 1978, Kortlandt 1990.

235. See Braune~Eggers 1987:§304 Paradigmentafel, and cf. Jasanoff 1978:§52.

236. The fact that weak verbs class III probably originally formed their weak preterite without a connecting vowel, cf. Jasanoff 1978:§77, appears to confirm the supposition that the medial **-ē-* was originally only proper to the present stem, and that therefore the infinite forms would continue the endings in Germanic **-a-* proper to regular thematic verbs, cf. Bammesberger 1986:100-01.

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formations.²³⁷ Therefore I prefer to assume that the stem vowel in this attestation probably represents urnordisch short **a*, and that rather than being a reflex of early shortening of Germanic **-ǣ-* before a heavy consonant cluster, it is a direct continuation of the more archaic formations in **-and-*.

7.14.2. *The inflection of the present participle.* The IE present participle in **-nt-* was originally declined athematically, and it has been noted above how this analysis fits in well enough with the urnordisch composition vowel in *witada-*.²³⁸ Traces of this declension are still preserved in Germanic, such as Gothic *gibands*, nom./acc.pl. *gibands* and in substantive forms like ON *gefendr* from **-andiz*.²³⁹ However, already even in substantivised forms the transference to other classes can be seen taking place. Of particular interest is Gothic *þusundi*, *þusundjos* which has moved to the feminine *jō*-stems unlike, say, OE *þusend*.²⁴⁰ This is reminiscent of the shift of the adjectival declension of the present participle to the *ja-/jō*-stems in West Germanic, which may have been triggered by the inherited feminine nom.sg. ending in IE **-ī*.²⁴¹ On the other hand, in North and East Germanic the adjectival flexion merged with the *n*-stems, possibly for much the same reason.²⁴² The post-syncope Eggja stone

237. So ON *dómandi* 'judge' vs. *dæmandi* 'judging'; on this, see Jasanoff 1978:§76.

238. See §4.7 and cf. Szemerényi 1990 IX:§6.1.1.

239. OE also has relics like nom./acc.sg. *fr̥ond*, nom./acc.pl. *fr̥end*, see Campbell 1959:§632, although *i*-umlaut has been levelled throughout the paradigm in examples like *āgend*, possibly due to an early transfer to the *i*-stems, as opposed to Old Saxon *hēliand*, cf. Holthausen 1921:§321. In OHG the athematic flexion only survives in obscured formations like nom./acc. sg./pl. *friunt*, cf. Braune ~ Eggers 1987:§§236-37.

240. Assuming this is an original present participle formation, cf. Lehmann 1986:368.

241. See, for instance, Bammesberger 1990:§9.4.3.

242. So explaining why the feminine present participle declines specifically as an *fn*- rather than *ōn*-stem in Gothic, see Braune ~ Ebbinghaus 1981:§133. In Norse,

7. Formational suffixes

already has the present participial forms KJ 101 **suwimade** and **galande** which are compatible with *n*-stem nom.sg. endings, although due to the difficulties in first reading and then interpreting this inscription the gender is not clear-cut.²⁴³ Since the element **witada-** is likely to represent a substantive formation, however, there is no reason necessarily to assume that it already exhibits the composition vowel proper to an *n*-stem.²⁴⁴

7.14.3. *The summing up.* The most economical interpretation seems therefore to be that both unaccented vowels in KJ 72 Tune **witada-** represent **a*, and this is wholly compatible with the later evidence.

the common gender plural also adopted what seem to be *fn*-stem endings, see Noreen 1923:§435. As the regular weak adjectival paradigm had developed a common plural declension in *-u*, possibly the better to cope with those examples where the adjective had two nominal referents of conflicting genders, their example may well have spread to the inflection of the present participle and adjectival comparative. The reason then for the victory of the *-i* forms here was that only the feminines, by virtue of their adoption of *fn*-stem endings, offered a set of plural endings which differed formally both from the substantive (unlike the masculines in *-ar*, *-a*) and the alternative weak adjectival (unlike the neuters in *-u*) paradigm.

243. Indeed according to Grønvik 1985b:77,84-86 the form **galande** should have a word division in the middle of it.

244. Although there are no formal objections to such a view, see Meid 1967:§§20-21.

8. THE FINITE VERBAL ENDINGS

8.0. *Introduction*

The verbal forms have been left to the end simply out of taxonomic convenience rather than because they represent developments which are different in kind from those in other final syllables. As it happens, we are blessed with several endings which are relatively well attested and therefore it can hopefully be assumed that these constitute a more representative sample of evidence than usual.

8.1. *The 1st person sg. pres. active indicative*

This ending is securely attested in KJ 17a Eikeland **writu**,¹ KJ 70 Järsberg **waritu** and KJ 127 Seeland 2 **gibu**, whilst KJ 134 Sievern **wrilu** is usually emended to **writu** to provide a circumstantial further example. An even more dubious instance is provided by KJ 27 Kragehul spear-shaft **wiju**. Although some scholars have taken this to be the 1st pers.sg. of a verb related to OI *vīgja* ‘to hallow’, it must be regarded as unreliable due to the lack of context and the uninterpreted status of the runes following, and is duly disregarded by Antonsen 15. The same uncertainty applies with even more force to KJ 24 Vimose buckle **wija**, interpreted since Marstrander as Gothic in character.²

1. According to Knirk 1980-81:212-13 the alternative reading of the sequence **writuirunog**, as **writumruno** ... offered by Antonsen 53 is based on a faulty analysis of the surface of the object.

2. On the difficulties with the word-divisions in this text, see above §5.5.

8. The finite verbal endings

A uniform representation in *-u* for the reconstructed ending **-u* is exactly what would be expected from all the comparative evidence, given that our only three certain examples are strong verbs.³

8.2. *The 1st person sg. pres. middle indicative*

As is well attested, the ON verb *heita* 'to call' preserves a dual declension pattern, in that when used in an active sense it follows the regular strong verb flexion as exemplified by OI *heit*, *heitr*, but when the voice is passive a different set of endings appear in OI *heiti*, *heitir*. Gothic alone among the Germanic languages preserves a moderately full set of such present passive verbal endings, i.e. 1st/3rd pers.sg. *haitada*, 2nd pers.sg. *haitaza*, pl. *haitanda*, but outside Gothic remnants of the inherited Germanic middle voice are also only preserved elsewhere in this particular verb, in OE *hate* 'I call, order' as opposed to *hatte* 'I am called'.⁴ It is generally assumed that these phenomena are of the same IE origin.⁵

Several 1st pers.sg. instances of this relic inflectional pattern appear to be attested in the urnordisch inscriptions with the passive sense 'am called'. The forms are KJ 27 Kragehul spear-shaft *haite*, KJ 70 Järsberg *hite*, and before an affixed personal pronoun KJ 29 Lindholm *hateka* and KJ 127 Seeland 2 *haitika*.⁶ The anomalous representation of the unaccented vowel in the latter example may perhaps be attributed to the presence of the affixed 1st pers.sg. pronoun, but also might be due to the relatively late

3. On the alternative ending in KJ 130 Trollhättan *tawo*, see above §7.10.

4. See Wright 1954:§286, Campbell 1959:§727.

5. See Noreen 1923:§532,2, Brøndum-Nielsen 1950-73 VIII:§911 with references.

6. Apparently this verb was particularly susceptible to inexact representation of the diphthong in the root, assuming all these forms are analysed correctly. The second possible example on the Järsberg stone KJ 70 *hait(...)* unfortunately seems to have lost its ending off the edge of the stone.

8.2. The 1st person sg. pres. middle indicative

date of the Seeland 2 bracteate (KJ 127). While it could be a pure coincidence that neither the *e*- nor *o*-rune appears in this inscription, it seems clear that the *u*-rune is used for **w* which may indicate the beginnings of the reduction of the 24-character futhark. Either way, the form *haitika* is not unambiguous evidence for a spelling of this ending with <*i*> in urnordisch. Therefore it seems we must assume a regular spelling with *-e*, and to judge from the later reflex in Old Norse *heiti*, this should be considered a long vowel.

8.2.1. *The inherited synthetic middle voice.* A specifically 1st pers.sg. ending is unique to Norse within Germanic, since elsewhere what appears to be the etymological 3rd pers.sg. ending is used in this function in Gothic *haitada* and OE *hätte*. In the handbooks, the Norse form is derived from Germanic **-ai* and related to the ending seen in Sanskrit *bhārē*.⁷ On the other hand, the 2nd/3rd pers.sg. present middle *heitir* appears to exhibit a rather different treatment, ie. apocope, of the final diphthong in the original proto-Germanic sequence **-a/izai*.⁸

Although there have been several attempts to reconstruct the IE middle endings in **-ai* as non-original, and thereby to dispense with the awkward divergent developments of the final diphthong, these have generally proved unconvincing. Markey claims that the phonological inconsistencies can be avoided by using a set of IE reconstructed endings in **-a*, **-t*, **-o* later

7. See Streitberg 1896:§212,1. According to Lindeman 1967:140, Old Norse *heiti* must instead be derived from an IE thematic **-ōi*, which is preserved in the Sanskrit subjunctive *-ai*, rather than from the IE athematic form **-oi*. From a Germanic point of view this causes no particular difficulties, in that it involves regular shortening of the long diphthong and subsequent coalescence with Germanic **-ai*.

8. It is possibly also relevant that both the ON and OE endings attested fit conveniently into normal declension patterns; thus *heiti*, *heitir* works as a weak present stem whilst *hatte*, *hatton* appears to have been reanalysed as a weak preterite. It is possible that some restructuring is responsible for this and that therefore the evidence does not represent the regular phonological developments as clearly as we might hope; see below.

8. The finite verbal endings

reformed to Germanic **-a* (extended to **-aða* in Gothic and OE), **-asa*, **-aða*, and also that 'retention of **-o* as *-a* in the mediopassive merely indicates recent reformation, not an anomaly; there is no evidence for the retention of original *-a* in absolute final position in late PGmc'.⁹ However, if the original vowel in the final syllable was not phonologically retained, then it is difficult to see where the model for this reformation could have come from, whilst if the reformation was so ancient as to be prior to loss of primitive Germanic **-a* in absolute finality, then the syllable should have been lost subsequently. On the Gothic *haitada* paradigm Szemerényi says that 'die gotischen Passivendungen entsprechen offensichtlich den idg. Endungen auf *-ai/-oi*, nicht angeblichen, sonst unbekannten, Endungen auf *-ō*. [Note 8:] [...] Ein *-da* aus idg. *-to* (Watkins [...]; Markey [...]; Kortlandt [...]) ist unmöglich'.¹⁰ Szemerényi's is the position adopted here.

If we are forced to assume a divergent phonological development with loss of earlier **-ai* in Old Norse *heitir* but not *heiti*, this could well be tied in with various other phenomena where final syllables, especially in bisyllabic morphemes, seem to undergo greater reduction when separated from the root by at least one medial syllable.¹¹ Since however there appear to be no attestations of anything other than the 1st pers.sg. ending in the urnordisch inscriptions, this speculation is best left until later (§9.4).

9. 1972:44-45, see also Kurylowicz 1964:58-60, Watkins 1969:§204 and Kortlandt 1981:131-32. One of the motivating factors in this restructuring of the Germanic middle voice appears to be the uneasiness which surrounds the replacement of the medial vowel seen in Greek *-εταῖ* by the *o*-grade in Gothic *-aza*, *-ada*. However, this is partly defused by the position of Jasanoff 1978:§41 who claims that non-alternating thematic **-o-* as in Gothic (though not ON) is on the whole more characteristic of the middle than the active voice, and notes the possibility in §46 that the **e/o* variation in the thematic middle in Italic, Greek and Celtic 'is the result of a secondary re-assimilation to the pattern of the active' as opposed to Gothic, Tocharian and Anatolian which all have non-apophonic **-o-*.

10. 1990 IX:§2.2.1.

11. Cf. above §6.1 and §7.11.3. However, the phonologically expected reflexes would probably be 1st pers.sg. *heiti*, 2nd pers.sg. (and by extension probably also 3rd pers.sg., cf. the parallel shift below §8.3) ***heitri*, and it is not obvious that such a situation could have maintained itself within the Norse system of verbal endings.

8.3. The 3rd person sg. pres. active indicative

8.3. *The 3rd person sg. pres. active indicative*

The form KJ 96 Stentoft **bariutip** appears to retain the expected urnordisch shape of this ending.¹² Although the transitional inscriptions can provide no positive proof for representation of endings in urnordisch, this does happen to tally well with the comparative evidence of Gothic *bairip* or more exactly OE *breoted*, and is therefore welcome support for our reconstruction in urnordisch **-ip/-ið*.

8.4. *The 3rd person sg. pres. active subjunctive*

The evidence for this category lies solely within the inscription on the Strøm whetstone.¹³ Despite the fact that this text is in some respects fairly clear to interpret, accounting formally for the three verbal forms KJ 50 **wate**, **skapi** and **ligi** has proved very difficult. According to Antonsen 45 they are imperatives, whereas most other commentators have assumed them to represent 3rd pers.sg. subjunctive endings which does appear to be syntactically the more likely; however, either way the divergent reflexes are awkward to explain. There seems no reason to agree with Krause that the final vowel should have been susceptible to early shortening only after short syllables, thus accounting for **skapi** and **ligi**,¹⁴ whilst Antonsen's explanation of **wate** as from a class III weak *ē*-verb has little to

12. Cf. KJ 97 Björketorp **barutr**, and see Antonsen 1978:287-88. This is not the place to tackle the question of why the 3rd pers.sg. throughout Norse appears with a final *-r* rather than the **-ð* which would have been expected; see Holland 1980 with refs., adapting an idea proposed by Kock 1898b. As noted by Brøndum-Nielsen 1950-73 VIII:§782,1, it is probable that various distinct factors were at work, but in particular the interesting if unquantifiable phonetic interaction between Viking age Norse *r* and *ð* remains very suggestive.

13. For Marstrander's interpretation of KJ 20 Thorsberg chape **waje**, as a 3rd.sg. pres. subjunctive, see above §4.9.

14. 1971:§15 and §49.

8. The finite verbal endings

recommend it; such a formation does not fit well with the causative cum factitive nature of a verb 'to wetten'. Phonologically the most natural approach must still be to relate the divergence to the length of the preceding syllable, and perhaps argue that while **wate** reflects the vocalic reflex of the semi-vowel in the ending **-ijē*, **skapi** and **ligi** exhibit a local assimilation of **-jē* to something like **-(j)l*. However, this is pure speculation so long as the exact morphological analysis remains so uncertain, especially given the difficulties in interpretation of the line **haha skapi hapu ligi**. These verbal forms are not securely identified within a syntactic context, and nothing definite can be concluded about the representation of this ending in urnordisch from them.

8.5. *The 1st person sg. weak preterite indicative*

Within a context established by the presence of the 1st pers.sg. pronoun in the text, instances of this ending can be identified in KJ 14 Etelhelm **wrta**, KJ 43 Gallehus **tawido**, KJ 59 Ellestad **raisidoka**, KJ 60 Vetteland **faihido**, KJ 71 By **orte**, KJ 72 Tune **worahto**, KJ 73 Rö **satido** and KJ 75 Kjølevik **hlaiwido**.¹⁵ In addition KJ 63 Einang **faihido** and KJ 73 Rö **fahido** are traditionally added to the corpus on formal grounds. In both latter cases the runic sequence preserved to us is likely to be incomplete and it is therefore possible that a 1st pers.sg. pronoun in **ek* should be reconstructed as having originally been part of the inscription,¹⁶ but nevertheless these two forms can as a result only be used as circumstantial evidence.¹⁷

15. Presumably a mistake for **hlaiwido*, caused by adding an extra branch to the second rune which was then corrected by making a bind-rune out of the first.

16. Cf. the suppletions in Krause 1971 nos. 19 and 76, though for KJ 73 Rö von Friesen 1924:19 dismisses this option on the grounds that there is no room between the beginning of the line and the edge of the stone. It seems possible that this line is syntactically borrowing the *ek*, as it were, from the first line **ek hrarar**

17. On the other hand, KJ 128 Väsby and Äskatorp **f(a)hidu** is far too dubious a

8.5. The 1st person sg. weak preterite indicative

However, from the forms which are securely identified on syntactic grounds three distinct representations of the ending appear to be attested in -o (six times), -e (once) and -a (once). Given the rather small number of tokens, this numerical bias should perhaps not be afforded too much weight, but in fact scholars have generally sought to explain the latter two isolated examples away on the grounds that they do not fit in with the -o endings.

Firstly, KJ 14 **wrta** appears on the much-maligned Etelhelm brooch,¹⁸ and has been dismissed as unreliable evidence for urnordisch for two reasons. Firstly, it is the classic example for identifying corruption of a text due to faulty execution on the part of an illiterate metalworker.¹⁹ Since the earlier attempts at supplying vowels to fill out the text **mk mrla wrta** went out of fashion,²⁰ it has become more common to emend the **m**-runes **ᛞ** to **e**-runes **ᛚ**, and so end up with a rather strained *ek erilar ...* formula. To be sure, this may be a methodological advance, as the habit of reading inscriptions by supplying vowels at will is obviously both very tempting but also very dangerous, and the fact that such speculations cannot be opposed on rational grounds speaks against it as a point of method rather than in its favour. Nevertheless, the new working practice is just as susceptible to corruption as the old one if caution is not exercised in its use, and this inscription appears to illustrate the point well. If Antonsen's claim that the attested final -a(a) (i.e. **ᚿ**(**ᚿ**)) sequence could also be a copying error assumes that the exemplar had -o (i.e. **ᚾ**), then it has no real justification; there is no parallel likeness between the rune shapes and any putative

reading to use here given the corruption evident in the text, cf. DR BR. 66 and 74.

18. Read **wortaa** by Antonsen 110. Although the second -a is dismissed by KJ:39 as a badly executed framing line, Marstrander 1952:166 prefers to assume that the 'siste tegn er vel av magisk natur. Oppfattes det som en rune, står valget mellom **ᚿ** a og **ᚿ** l.' However, reading the first syllable as -**or**- seems to be due simply to the corrupt and untidy state of the inscription as we have it.

19. See Moltke 1985:119.

20. As in Marstrander 1952:165.

8. The finite verbal endings

reconstructed form ***worto** must be considered more wish-fulfilment than argument. Of course, the point could be made that an inscription which needs to be emended at one point should not have faith placed in it at other points, but this is plainly too sweeping. Work on runic inscriptions as well as medieval manuscripts runs up against similar problems where a *Vorlage* has been corrupted in the process of transmission, but any such corruption must be demonstrably likely on external grounds for arguments to this effect to have any validity.

The most satisfying explanation takes **wrta** to represent ON *orta* with reduction of the final **-ō*, spelt elsewhere *-o*, to something spelt *-a*.²¹ The late date that this seems to presuppose might also help to explain the apparent omission of the root vowel in **wrta**, if we were to assume that it represented **(w)urta* with the **w**-rune coming to develop an ambiguous function between the values **w-* and **u-*.²² On the other hand, such orthographic phenomena do not agree very comfortably with the conventional dating of the clasp to c. 500, which would seem rather early to posit such developments. Aside from arguments over the age and accuracy of the inscription, there remains the issue of its linguistic provenance, since it does happen to come from Gotland and so some scholars, like Krause, have related **wrta** to Gothic *waurhta*.²³ Since Krause

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21. Grønvik 1981:218-19 (note 97) suggests emendation to **ek erla wrta* with a feminine *jarla* 'jarlsfrue' as the subject of a 1st pers.sg. verb, and with both forms showing development of final **-ō* to *-a* as in attested Old Norse; cf. below §9.5.2 on KJ 97 Björketorp **runar**.
22. The motivation for which would be the transitional loss of **w-* before back vowels, which presumably included both the rune-name **wunju*, see Liestøl 1981:253,256, and also forms like KJ 71 By **orte**. The use of the **w**-rune for the vowel *-u-* in the elder futhark part of the Rök inscription may possibly also reflect this shift of value, but note that the **j**-rune is similarly used for *-i-*.
23. 1971 no. 23. Following him, Euler 1985:14 argues that especially KJ 14 Etelhelm **wrta** and KJ 24 Vimose buckle **asau** are clear evidence 'daß wir im süd-skandinavischen Raum von Gotland bis hin zu den dänischen Inseln gerade in frühurn. Zeit bis ins 5. oder gar 6. Jahrhundert offenbar noch mit ostgerm. Sprachresten rechnen müssen'. This on the face of it rather implausible claim can be judged on the basis of the brief historical discussion above in §5.11.3. His view

8.5. The 1st person sg. weak preterite indicative

still relied on the older **mik Mēri-la worta* interpretation, this view was forced upon him by his recognition of the form as a 3rd pers.sg. preterite. However, it seems on balance more likely to represent a 1st person ending, and I can see no advantage in positing a distinctly East Germanic linguistic community in Gotland this late in the urnordisch period.²⁴

The second form is the awkward KJ 71 **orte** on the By stone. It is customary to introduce a punctuation break into this text to give **ek irilar. hrorar hrorer orte ...**, so supplying a formally more acceptable 3rd rather than 1st pers.sg. verbal form, which gives the inscription a rather schizophrenic touch if it is assumed that the **irilar** and **hrorar** are the same individual. However, this is done solely on a circular basis as a concession to the fact that *-e* is more easily analysed as a 3rd pers.sg. ending. Grønvik surveys a number of parallels for such punctuation without making any observations to help us out of the difficulty;²⁵ in fact, even where he posits such syntactic breaks elsewhere, specifically 1st pers.sg. forms of the verb are found on both sides of the split anyway. Despite the rather hopeful claim that KJ 16 Bratsberg clasp **ekerilar** provides a parallel for having just **ek erilar ...* in a clause,²⁶ which can therefore be applied to the By inscription to split the formula off syntactically from the rest of

that other traces of the East Germanic languages were soon sucked up and repressed by the conservative urnordisch *koine* seems equally unlikely; even if you believe in an urnordisch *koine*, surely a 6th century brooch is too late a date for such an analysis, cf. above §2.1.2.

24. It is of course possible that such a community may have existed, but there is no way of demonstrating it. In forms like **ek* with a mid-vowel and **erla*, which under some interpretations at least looks to have retained a final short stem vowel (cf. above §5.11.2), we can discern notably non-East Germanic features anyway. Despite the much-vaunted parallels between Old Gutnish and Gothic, they are in general to be classed as retention of shared archaic features rather than shared innovations; and since there is nothing to suggest a specifically East Germanic development of the unaccented vowel system in Gutnish, the theory of a Gothic ending here should be dismissed as unfounded speculation.

25. 1976:164-65.

26. KJ:160.

8. The finite verbal endings

the sentence, this solution seems too forced to credit. A possibly rather more useful idea is that this form represents the earliest known instance of suppletion of the 1st pers.sg. by the 3rd pers.sg. weak preterite ending,²⁷ a substitution which is standard in East Norse and frequent already in the earliest Norwegian manuscripts.²⁸ There are then possible escape routes available, but these contortions are only necessary if it can be reliably argued from other evidence that *-e* is an impossible spelling for the 1st pers.sg. weak pret. ending. Analysis of the urnordisch inscriptions by morphological categories was designed specifically to bring out such instances of fluctuating orthography, and there are no non-arbitrary grounds for assuming that *orte* is a more flawed representation of this ending than any of the others.

Traditionally the 1st pers.sg. ending is reconstructed as Germanic **-ōn*.²⁹ The majority of the spellings are in *-o*, which would fit neatly with this reconstruction, but others also appear. If *-a* is accepted as a legitimate orthographic variant, then it may possibly be ascribed to the effects of shortening in the transitional period, effects which can be identified elsewhere.

8.6. *The 3rd person sg. weak preterite indicative*

Ideas concerning the urnordisch representation of this ending, apparently once safely established, have been thrown into chaos by the discovery of two new inscriptions over the last few decades. The securely attested examples are KJ 13a Nøvling *talgidai*, KJ 30 Garbølle *tawide*, KJ 136

27. As suggested by Noreen 1923:§534.

28. Noreen 1904:§563,3 and 1923:§534,1, Brøndum-Nielsen 1950-73 VIII:§845, although Seip 1931:194 notes that at least some of the Norwegian data may be due to phonological rather than morphological confusion.

29. As in, for instance, Bammesberger 1986:§9.2.2 and §14.6.2; for theories concerning the origin of such weak preterite endings, see below §8.6.1.

8.6. The 3rd person sg. weak preterite indicative

Tjurkö **wurte**, Illerup shield-mount 2 **tawide** and Udby **talgida**. Alongside these we can put KJ 95 **sate** from the Gummarp stone, a text which however may well show signs of syncope (cf. §5.9.3), KJ 130 Anm. Halskov **fahide**, which can be plucked from a sequence of jumbled and corrupt runes to be read as a possible preterite form,³⁰ and possibly even circumstantially KJ 71 By **orte** (see just above §8.5). Therefore, where the evidence once consisted only of endings in **-e**, those attestations have now been joined by two other forms in **-a** and **-ai** respectively.³¹ As with the 1st pers.sg. ending, the two divergent spellings have been subject to considerable interrogation in efforts to reinstate the hegemony of the **-e** ending.

8.6.1. *An urnordisch diphthong?* Although KJ 13a Nøvling **talgidai** has been generally accepted as a verbal ending, an actual analysis has still proved difficult. Before moving on to discuss the various proposals which have been mooted, it should initially be noted that there is a possibility of segmenting the form as **talgida i** ‘inscribed in(to)’ and so reading a verbal preterite **talgida**. This idea was raised by Stoklund on the analogy of similar sequences like KJ 17a Eikeland **writu i** ... and, at least according to Krause’s reading, KJ 30 Garbølle **i tawide**,³² but until the discovery of

30. But cf. the rejection above in §8.5 of the similar forms on the Väsby and Äskatorp bracteates (KJ 128).

31. Antonsen 1975b:§6.3 lists two further instances of the **-ai** ending, namely his no. 60 **aiwuidai** and no. 9 **maridai**. For the first, much the same interpretation, though with a slightly different word-division leading to a verbal form **aiwuida**, was also proposed by Noreen 1923 Anh. 13. This might be sufficient to cast doubt on the necessity of analysing a form with an **-ai** ending, but also both the semantics and the reading of the runic sequence in the necessary order with the necessary word-divisions are so strained that this inscription is best left uninterpreted, see DR BR. 11. The second example relies on the reading of KJ 22 Vimose chape **mariha|i** as **marida|i**, but unfortunately there is no sign of the required second cross-branch and the reading is runologically impossible according to Stoklund 1987:297, who tells me *pers. comm.* August 1992 that Antonsen has now accepted this.

32. 1991:§7.1.

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the Udby fibula a verbal ending in **-a** was little improvement over one in **-ai**. Nevertheless, like Stoklund I find this proposal rather unlikely, and even though the inscription on the Eikeland clasp KJ 17a **ek wir wiwio writu i runor asni** provides a slight parallel, at least here we have a specified rather than merely implied direct object for the verbal phrase **writta I*.³³ Naturally, such a word-division would also imply belief in that the antecedent of ON *telgja* as attested on the Nøvling clasp (KJ 13a) could be used with the specific sense of 'inscribe' rather than 'shape by cutting', which has been assumed by most commentators.³⁴ The most natural reading must be to take **talgidai** as a genuine verbal form, but as such has proved rather controversial.

The runological escape route posited by Moltke was that the form could be a mistaken copy of an original **talgide*;³⁵ however, this view has little to recommend it.³⁶ Firstly, *pace* Moltke there is no reason to suppose that this verb could not mean 'cut in metalwork' as well as its primary sense of 'cut in wood',³⁷ and therefore no necessity of presupposing a wooden exemplar from which the smith made his copying mistake. Secondly, the presumed confusion between the rune **M** and the sequence **FI**, never very convincing at best, is rendered even more unlikely by the dominance in this group of early Danish fibulae of the flat-topped form of the *e*-rune **FI**. Moltke's rather harsh judgement on the runological competence of the smith is therefore unjustified.

This leads to the supposition that the ending is etymologically correct and represents an early urnordisch diphthong **-ai*, which would have serious repercussions for the debate over the origin of the Germanic weak

33. Grønvik 1987:§11.

34. Cf. Krause 1971 no. 69, Grønvik 1990a:§4.

35. 1985:89.

36. As pointed out by Stoklund 1991:§6.3.

37. 1985:124.

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preterite. The 3rd pers.sg. form is traditionally reconstructed as Germanic **-ē(p)*,³⁸ but numerous conflicting theories concerning the origin of the dental preterite formation have been proposed over the years without managing to reach any reasonable consensus. The most relevant ideas here are naturally those that have posited an ending resembling Germanic **-ai* in this desinence, the best known of which are the variations on the theme whereby the Germanic weak preterite is derived by activation from some form of the IE middle voice.³⁹

To examine the long and wide-ranging arguments which have been put forward would obviously be a very foolhardy thing to attempt here. However, theories relying on derivation from an older set of middle voice endings not only seem to require an extremely convoluted and unmotivated series of analogical reformations, but also can only have provided a very limited base for the spread of the formation to the rest of the Germanic verbal system. Lühr observes that 'ingsamt läßt sich aber zu einer Herleitung des schw. Prät. aus einem uridg. Perf. Medium sagen, daß unklar bleibt, warum sich diese uralte Bildung gerade bei solchen Verben, die von Haus aus kein Perf. hatten, so ausgebreitet haben soll. Auch wenn die schw. Präteritalbildung zu schwundstufigen *ie/o*-Verben des Typs got. *waúrhta* noch am ehesten mit dieser Theorie vereinbar wäre, so bleibt m.E. doch der Gesamtanwendungsbereich des schw. Prät. unerklärt.'⁴⁰ In any event, this theory is only one of several points of departure for the origin of the Germanic weak preterite. Tops surveys numerous alternatives, and the one thing most of them tend to agree on is positing a 3rd pers.sg.

38. On accounting morphologically for the singular **-ō(m)*, *-ēs*, *-ē(p)* endings, see Lühr 1984:47-49.

39. As proposed by Hermann Collitz and more recently taken up again and adapted by Jasanoff 1978:§78 and Hollifield 1980:161-62. Tops 1974:50-59 notes some criticisms of Collitz's theory, most of which are neutralised by the modifications made by Hollifield, who relies specifically on the notion that the IE perfect middle is at the root of it all.

40. 1984:41,51.

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ending **-ē(p)*. Therefore the whole field is far too uncertain to draw conclusions from as props for arguments in other spheres of contention. It is necessary that we first decide from an analysis of the Germanic material what the earliest form of this ending was, and work backwards.

To this end, Hollifield attempted to show that other Germanic evidence besides KJ 13a Nøvling *talgidai* pointed towards an earlier **-ai*.⁴¹ In essence his argument was that the continental German dialects of Old High German and Old Saxon favoured *-a* as a reflex of original **-ē*, whereas earlier **-ai* yielded *-e*, and that the 3rd pers.sg. weak preterite ending was attested in the latter category. However, despite the large amounts of evidence deployed, there were several weaknesses in his case.⁴² Firstly, the data he drew from the Monacensis MS of the Old Saxon *Heliand* (M) cannot be used to support this position, since the unaccented vowel system of this manuscript is rather to be analysed as the regular Ingvaenic 4-way system of **i*, **a/e*, **o* and **u* with fluctuation between *<a>* and *<e>* conditioned by external factors.⁴³ This is a more plausible position than Hollifield's positing of three distinct unaccented phonemes */a/* vs. */æ/* vs. */ε/*, all of which orthographically partially overlap.⁴⁴ As a point of typological interest, we can compare Hollifield's approach to this data with Bjerrum's observation 'that it is more difficult to see that there is only one vowel where two had been expected than it is to discover vowel nuances that had not previously been noticed'.⁴⁵ This reservation seems to be particularly valid in close examination of individual texts, where scribal and morphological factors will usually misrepresent genuine phonological

41. 1980:150-60.

42. For some counter-arguments, see also Lühr 1984:75-76 (note 131).

43. Klein 1977:390-91,415-16.

44. 1980:163-64; this seems to be a rather crowded system, cf. Stiles's maxim on the unaccented vowels being a subset of those available to accented syllables (above §2.2.3).

45. 1973:44.

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distinctions. Given its well-known history of influence from High German, especially Frankish, orthography, such caution is even more desirable when approaching an Old Saxon text. Attempting to formulate the phonological and morphological factors which lead the scribe of M to prefer <a> or <e>, Klein concludes that the spelling of the 3rd pers.sg. weak preterite ending as *-de* is *morphemgebunden*, and has generalised <e> from earlier fluctuation.⁴⁶ The argument that these Old Saxon *-de* spellings indicate an etymology in **-ai* therefore cannot be maintained.

In addition, Hollifield's attempts to explain away certain other data are unconvincing. He argues that the OHG 3rd pers.sg. weak preterite ending *-a* in *nerita* is not directly from his posited ending **-ai* but is rather due to the generalisation of **-ō-* in the OHG singular weak preterite endings, cf. 2nd pers.sg. *neritōs*.⁴⁷ However, relic 2nd pers.sg. forms in *-ēs* seem also to be attested,⁴⁸ and therefore it must be uncertain when the analogical levelling of **-ō-* throughout the paradigm took place. If we agree with Hollifield that final Germanic **-ai* gave OHG *-e* whilst original **-ē* gave *-a*, then OHG *nerita* may equally well confirm the traditional reconstruction in Germanic **-ē(p)*. Likewise the Gothic 2nd and 3rd pers.sg. weak preterite endings in *nasidēs*, *nasida* seem to fit rather well with an origin in Germanic **-ē-*, whereas Hollifield is forced to explain the 2nd pers.sg. *-ēs* (for expected ***-ais*) as due to analogical levelling from the 3rd pers.sg. ending when it was at the medial stage of the putative progression **-ai* > **-ē* > *-a*, which is a far less satisfying arrangement.⁴⁹ There is therefore no Germanic evidence in favour of Hollifield's position except KJ 13a Nøvling *talgidai*, but tentative indications against it.

46. 1977:433-38,452.

47. 1980:151.

48. Braune ~ Eggers 1987:§319 Anm. 2, Wilmanns 1906-09:§34.

49. 1980:160.

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8.6.2. *Could they spell?* An alternative explanation accepted by many commentators is that **talgidai** represents a back-spelling after coalescence of unaccented */ai/ and */ē/.⁵⁰ Antonsen in particular was vociferous in support of this interpretation, arguing that ‘sound philological method requires us to interpret inverse spellings as reflections of coalescences’.⁵¹ As presented, arguments along these lines appear to presuppose some form of orthographic tradition at work leading runesmiths to continue using the digraph -ai even though according to the acrophonic principle it no longer mapped phonologically, but it is necessary first to discover such a spelling tradition before making conclusions about inverted spellings. In the later runic period, where we have far better evidence for widespread and competent literacy than for the period of the Nøvling clasp, it is extremely difficult to demonstrate the nature, or even the existence, of a traditional orthography at work.⁵² However, since it remains a possibility that **talgidai** need not actually represent a diphthong, it seems possible to take a more flexible approach.

The elder futhark inscriptions show a distinct tendency to have trouble with representation of diphthongs. Fairly plausible instances of inexact spellings are KJ 29 Lindholm **sawilagar**,⁵³ **hateka**, KJ 70 Järsberg **hite** and KJ 96 Stentoft **hider-**, **-lasar**, **-dud**, while once the principle were accepted the way would be open to identify other instances too, the most obvious being KJ 72 Tune **dalidun**.⁵⁴ The reverse phenomenon, the

50. Or */æ/, see Krause 1971:§58,13 and Antonsen 1987:20-21.

51. 1975b:§1.5.

52. See above §1.2.1.1 and §1.2.2.

53. At least according to von Friesen, amongst others, see 1924:98 and above §7.2.

54. The arguments against the natural identification of the precursor of ON *deila* here are rather weak. Grønvik 1981:88-89 follows Neckel's 1929 emendation to Seip 1929, who had first proposed the *dæll* root here as an alternative to *deila*. Since it is claimed that ON *deila* can only mean ‘dele opp’ and not ‘dele noe mellom seg’, Grønvik concludes that ‘det er da betenkelig å anta en betydning for urnord. **dailjan* som ordet ikke har i senere språk’. However, it seems more probable that

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representation of an original monophthong with a digraph, is also attested, though less commonly, cf. KJ 97 Björketorp **haidera** for OI *heðra*. Although they do not necessarily provide direct parallels, such orthographic tendencies can be mirrored in numerous younger futhark inscriptions as well.⁵⁵

Given this, and the presence of the alternative spelling in Udby **talgida**, I think a reasonable way to account for KJ 13a Nøvling **talgidai** is to assume that it is an approximate orthographic representation of a sound

the ON sense is a secondary semantic shift from the common Germanic meaning of 'deal (out), divide (up)', and one which may have been brought about by the arisal of ON *skipta* in this sense. It is also clear that still in early Old Icelandic texts *deila* can be used with the sense of 'divide up (amongst yourselves), share', as in *Grágás* (normalised from Finsen 1852:206 ll. 7-8) *þit skuluð deila kníf og kjötstykki ok alla hluti ykkar í milli sem frændr enn eigi (sem) fjáendr*. Therefore there is no reason to give the bulk of the Norse evidence primacy over, say, the West Germanic languages. Western 1930:289-91 also argues for recognition of *deila* and quotes the same inexact runic diphthongal spellings as parallels, whilst Marstrander 1930b:307-10 is forceful in support of Seip, although more on formal than semantic grounds as he dislikes the assumption of a *feilhugning* here. Grønvik's views in particular seem to form part of his general desire to identify specifically Nordic features in the urnordisch inscriptions, illustrated by his interpretation of KJ 72 Tune **arbija** as 'funeral feast', cf. ON *erfi*, rather than the more etymologically transparent 'inheritance'; see Grønvik 1982:5-9, 18-19 for summaries. I have no quarrel with the idea that urnordisch **arbija* could also mean 'funeral feast', and that the translation of **arbija** here must be made on the basis of the context in which we find it. However, since a fairly good case can be made out for ON *arfi*, *arfr* being secondary, specifically Nordic, formations alongside *erfi* (of both senses), I see no way to determine the exact sense of **arbija**, **arbijano** here by external arguments.

55. The representation of diphthongs by single graphs as in DR 66 **stin**, **tubr** is irrelevant here. The frequent assumption that such spellings indicate East Norse monophthongisation is unjustified, since phonological sequences /æi/ and /qu/ (or /œu/) could quite easily be analysed orthographically as **-ii-*, **-uu-* which could then be spelt *-i-*, *-u-* according to the well-known orthographic practice of simplification of geminates. On the other hand, the use of digraphs for monophthongs is of interest, and it is evident that such a method was used to cope with the large number of new vowel phonemes developed in the transitional period, thus DR 411 **aiftir**, **taipir**. Since we are looking for parallels in spirit, not detail, there is no need to go into this material any further; see K.M. Nielsen 1960:6-53 and the relevant sections in Lagman 1990 chapter 2.

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for which no equivalent rune existed.⁵⁶ It might be possible to make a case that a digraph -ai would scarcely be used to represent a monophthong when the language still possessed a diphthong */ai/, but this presupposes that the elder futhark was an ideal writing system used with ideal linguistic awareness by those who employed it. Such high standards are not required of most other writing systems, and I see no reason to apply them here.⁵⁷

In this light Udbý **talgida** is readily comprehensible as another attempt to approximate orthographically to the vowel in the ending. Alternative views are of course possible, but there seem no good grounds to deny that the spelling is the one intended. Although Stoklund notes the possibility of interpreting the inscription as Gothic, she ends up treating it as genuine urnordisch since it maintains the close links with the other fibulae of the same type, including Nøvling **talgidai**.⁵⁸

This leaves us then with three distinct representations of this ending. It is possible some sort of dialectal or chronological features may be involved, given that only -e is found uniformly outside the 3rd century Zealandic fibulae. However, there is little difference in either respect between the forms **talgida**, **talgidai** and Illerup shield-mount 2 **tawide**; the distribution of the evidence may therefore suggest a progression from

56. Stoklund 1991:§6.4 notes that 'die beiden Formen, -ai und -a, scheinen vielleicht eher eine gewisse Unsicherheit in bezug auf die Notation der Endung zu verraten.'

57. It does not, after all, prevent orthography such as that seen in the Tu stone from Rogaland (Niy 228) **hailki raisti stain þona aft kaitil brupur sin**, where digraphs are used both for the diphthongs in **raisti**, **stain**, and the monophthong in **kaitil**; for the word-division, see Johnsen 1958. Admittedly it might be possible to suggest some form of diphthongisation in **kaitil** for *Ke'til* as seems to be attested in certain medieval Norwegian manuscripts, see Seip 1931:163 and for the specifically south-eastern dialects Knudsen 1967:19-21. However, parallel instances are found in East Norse inscriptions also, as well as in other Norwegian texts such as Niy 453 **utar raisti stain aft(ir) aurn faupur sin** (or ... **aft (bi)aur**n ...) where we find the digraph -au- used to represent /q/.

58. 1991:§7.2, cf. 1991:§3.2 and Moltke 1985:121-22.

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uncertainty of representation to growing identity of this ending with the e-rune, although the limited size of the corpus prevents our reaching any really firm conclusions.

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Only KJ 72 Tune dalidun gives an attestation of this ending, and it is as transparent as any form in the elder futhark corpus.⁵⁹ Comparative evidence suggests a short vowel here, cf. OHG *neritun*, which is preserved at Norse syncope due to the effect of the following nasal, thus giving ON *heyrdū*.

59. At least syntactically and morphologically; for the semantics of the root, see above §8.6.2.

9. SUMMARY

9.1. *The short vowel system*

From the survey above, it can be concluded that there is much to be said for assuming a three-way set of short unaccented vowels, represented by <a>, <i> and <u>, for proto-Norse. This applies to those instances of short nominal stem vowels and finite verbal endings which have been identified in the runic corpus. For medial syllables in word-formational suffixes, the presence of suffix ablaut unfortunately makes a clear mapping difficult, as does the uncertainty surrounding the fluctuation of length in several morphemes. Nevertheless, here also the evidence fits in neatly with an assumption of three unaccented units corresponding to /a/, /i/ and /u/ in stressed positions.

This confirms the standard opinion, at least as far as a standard can be said to exist.¹ To be sure, the most obviously economical analysis might perhaps also include a unit spelt <e> specifically in the position before *-r-; this was rejected above (§7.12.5), albeit on structural grounds rather than because it fitted the evidence. Nevertheless, since the urnordisch accented short vowel system is generally thought to have contained the five units /a/, /e/, /i/, /o/, and /u/, this indicates that the unaccented vowels were already situated at the three extremes of the phonological space available. One consequence of this lack of correspondence may have been that the phonetic realisation of the unaccented vowels was relatively free.

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1. At least, such a three-way vowel triangle fits with the general opinion as regards the unaccented vowels within urnordisch. I would prefer to posit such a system also for primitive Germanic, with IE *e and *i coalescing unconditionally in unaccented syllables after the loss of original IE *-e in absolute finality; see Hollifield 1984:68 footnote 99, who believes that Germanic unaccented *e was only retained as such before *-r-, and Stiles 1988b:339-40, as opposed to the various environments for raising proposed by Wessén 1916:73-75, Lloyd 1961 and Antonsen 1972:138-39.

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Therefore, even though a phonemic reconstruction leaves /e/ and /o/ without a corresponding unaccented member, it should not be too surprising were we to find occasional instances of orthographic <e> and <o> where phonetic rather than phonological approximation had come into play. Due to the necessities of rigorous method, such an assumption has been avoided whenever possible, and attempts have been made to explain away the few apparent exceptions to the <a> ~ <i> ~ <u> triangle.

9.1.1. *The position before nasals.* In the sections above I suggested, contrary to popular opinion, that the various *n*-stem desinences attested in our corpus, namely nom.sg. -o/-a and oblique sg. -on/-an, might profitably be seen as competing orthographic representations of the same underlying phonemic sequence. This immediately seems to contradict what has just been said, in that there are no other convincing examples of a short unaccented vowel represented by <o> in the urnordisch inscriptions.² As I concluded above (§5.11.7), it is nevertheless probable that at least some of the attestations in -o are masculine both in reference and grammatical gender, and there are no good grounds for divorcing such endings morphologically from those which appear in -a. Although there are no such pressing reasons for demanding that any of the oblique case forms in -on should be analysed as masculine, much the same applies, since there are equally no grounds for differentiating them formally from the endings in -an, and the usual recourse of assuming they are feminine, far from being self-evident, is in fact quite awkward (cf. §7.11.5).

Naturally, since no other endings have been found in our corpus which hesitate orthographically between <o> and <a>, any such fluctuation must be accounted for. I propose therefore that already prior to our attested stage of urnordisch the masculine *n*-stem nom.sg. had undergone much the same restructuring as was described above for proto-West Germanic (§5.11.1). In this way the oblique forms in -on/-an can be identified as the

2. As KJ 75 Kjølevik **minino** cannot unambiguously be classed as short (cf. §6.1).

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results of Hollifield's partial raising due to a high vowel in the following syllable, possibly giving something like [-ɔn] which later fell together with *-a(n), ON -a. When this stem vowel was transferred by process of paradigm levelling into the nom.sg., the fluctuation continued in -o/-a before being levelled out to -a with subsequent loss at syncope. Since in OHG, at least, the result of this transference was possibly a new short vowel, which later coalesced in the nom.sg. with the shortening of West Germanic *-ō, the logical inference would be that for urnordisch, too, a fourth short vowel came into being. However, unless we wish to posit a distinct short unaccented unit simply for this one ending, it seems better to assume that nasalisation may have been responsible for preserving the allophonic distinction between /a/ = [a] and /a(n)/ = [ɔ], and that this nasalisation was transferred also to the nom.sg. The triumph of forms in -a may perhaps then be linked to the loss of nasalisation and the establishment of this vowel's phonemic identity with /a/.

On the face of it, this is fairly strained reasoning. Yet I would point to what is noted below (§9.1.2, §9.2.1) about the arisal of Old Norse unaccented /ɔ/ as the [+round] partner to unaccented /a/. The distinctive feature analysis of the urnordisch short unstressed vowel system suggested there has /i/ defined as [+high, -back/ -round], /u/ as [+high, +back/ +round] but /a/ merely as [-high]. Therefore /a/ was underspecified with regard to the feature [back/ round], or to put it another way this distinctive feature was redundant in this one position. Under such a scheme, I envisage spellings in -o- representing a rounded variant of /a/ which would fill in the system. I am aware that it is a distinct weakness that I have been so vague as to whether this was a phonemic distinction or merely an allophonic one, and if the latter then what synchronic conditioning factors were at work. An enlargement of the corpus of evidence might help to elucidate the matter further, but we may have to wait a long time yet for any significant new forms to crop up. The appeal to nasalisation to explain the posited rounded allophones is unfortunately also difficult to substantiate effectively; its only merit is that it appears to fit the distribution.

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Despite its evident weaknesses, this course of events has the following advantages over other approaches. In the first place, it allows for the feminine *n*-stem oblique cases already to have developed to **-ūn-* in urnordisch, so avoiding the difficulties in matching up the attested urnordisch forms in *-on* with ON *-u*. It must be seen as an unfortunate historical accident that no oblique feminine *n*-stem form appears in our limited corpus. Secondly, it marries together the *<o~a>* variation which is evident in both nominative and oblique cases as identical. Thirdly, it accounts for the historical progression where in late urnordisch *-a* comes to predominate as the nom.sg. ending.³ These seem sufficient benefits to render this alternative interpretation of the data at least as viable as the traditional one.

9.1.2. *The 3-way vowel triangle.* It is a very common notion that for the younger futhark period into the earliest stages of the manuscript tradition there existed just such a system of /a/, /i/, and /u/ in unstressed positions. As a consequence, two rather awkward steps have proved necessary. Firstly, the ubiquitous orthographic fluctuation between *<e~i>*, *<o~u>* and *<a~æ>* in Old Norse manuscripts has had to be explained away as purely allophonic. Secondly, all instances of vowels other than these three pairs in what appears to be unaccented position have necessarily been attributed to the presence of secondary stress on the syllable in question. As is obvious from the long-standing popularity of this view, a reasonable case can be made for these expedients, but nevertheless neither way out is so self-evident as is usually assumed.

3. Unfortunately the *-on/-an* fluctuation cannot easily be placed within a relative chronology, due to the fact that none of the instances can be externally dated. If identified correctly as in KJ, the form KJ 17a Eikeland *wiwio* may suggest that *-o-* forms could be retained in the oblique cases until the latter half of the sixth century; for the dating see Grønvik 1987:§9. This might indicate that nasalisation was maintained longer in the oblique cases than in the nominative, which given the transitional loss of final **-n* there is not unreasonable. On the other hand, the form *wiwio* is not definitely to be interpreted as an *n*-stem, see above §7.11.

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There is neither the opportunity nor the need to go into this question properly here, but I will take the chance to make a few points regarding it anyway, since, to be fair, there are good motives for assuming that this three-way system was in operation throughout Viking age Norse at least. In the first place, it is undeniable that no distinction can be drawn between, for example, those instances of short *-i* derived from etymological **-ī* and those from earlier **-ai* or **-ē*, and this holds in general for vowels which are the results of conflation of earlier long vowels. Secondly, the direct evidence of the younger futhark inscriptions appears to confirm that only these three contrastive units could appear in unaccented position, but then the orthographic poverty of the younger futhark is well known. In addition, most of the widespread fluctuation in representation of unaccented vowels in manuscripts can be fitted into one of several phonologically conditioned categories, such as vowel harmony, vowel balance, the different distribution between final open and closed syllables etc. Many of them, however, prove awkward to invoke.

9.1.2.1. *Stress assignment and vowel balance.* Despite the efforts of linguists and metrists working in various theoretical frameworks, there remain grave difficulties in trying to establish non-arbitrary rules for ON secondary (and tertiary) stress assignment.⁴ Nor, even once such rules have been discovered, is it easy to understand exactly why such fairly trivial degrees of accent should have the effects on phonetic realisation of the vowel that they are usually assumed to have had, or even whether they would have been distinctive enough to have any impact at all. It is, for example, disconcerting to find the formative suffix **-inga-* appearing as <-ing-> in early Old Icelandic *e/o* manuscripts, and then to encounter elements such as *-neskr* and *-rekr* in *i/o* manuscripts. In such cases it seems

4. These claims have had to be left unjustified here because of lack of the space necessary to give an account of Norse metrics.

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generally accepted that secondary accent is responsible for the *i*-forms in *e/o* manuscripts and the *e*-forms in *i/o* manuscripts without much consideration of what is actually at work.

Overall, it seems likely that in half-stressed position a distinction between unaccented /e/ and /i/ was still possible.⁵ The picture is mostly simpler in sources exhibiting traces of vowel balance, where it is clear that <e> is the reflex which consistently appears in lesser, and <i> in positions of greater, accent. Although I fully agree with Halvorsen's complaints that the lax term 'reduksjon' for <e>, <o> spellings due to vowel harmony is to be avoided,⁶ it cannot be denied that just such a term is appropriate, even if still somewhat metaphorical, for the results of vowel balance. It is difficult at times to quantify exactly what vowel balance is about, and then to check the results against our expectations, but the evidence suggests that, at least for syllables lacking any degree of significant secondary stress, any such fluctuation is indeed allophonic and so need not disturb our hunt for exceptions to the unstressed vowel triangle.

9.1.2.2. *Vowel harmony.* The reflexes of Old Norwegian vowel harmony provide an even more interesting example of the ambiguity which can result when an attempt is made to describe an orthographic system containing <æ>, <e>, <i>, <a>, <o>, and <u> in terms of three phonological units /a/, /i/, and /u/ by use of a series of synchronic rules. Of particular interest are the unaccented variants called forth by the phonemes *e* and *æ* in the root syllable. According to the usual formulation for early vowel harmony, short *æ* (usually from *-a- by *i*-umlaut) causes the high allophone <i> in the following syllable whereas etymological *e* is followed by the mid variant <e>. In his survey of the language of the Norwegian manuscript Holm perg 6 fol, Rindal points out that although

5. Although it is less clear how *-ing* and *-neskr* might end up on different sides.

6. 1989:116.

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<e> is the regular spelling for both original *æ and *e in accented position, the vowel harmony distribution still (mostly) follows the older etymological distinction, which leads him to claim that 'sidan grunnlaget for skilnaden er historisk, kan dei ikkje vere fakultative allofonar',⁷ and he is forced to conclude that accented /e/ and /æ/ are still at least to some extent different phonemes that just happen to be represented by the same graph. Much the same problem is discussed by Hagland, who claims that in early *trøndsk* the unaccented <e> ~ <i> variants preserve the etymological distinction in their distribution, even though accented *e and *æ again appear to have collapsed.⁸ However, Hagland is unable (or unwilling) to produce synchronic generative rules to handle this aspect of vowel harmony, and prefers to rely on a vague notion of etymological conservatism.

There is only rather limited evidence for the distinction between accented /e/ and /æ/ in early Old Norwegian, and such phenomena in, for example, the manuscript GkS 1347 4° had already led Hægstad to claim that such an opposition must have been maintained in the stressed syllable, since the vowel harmony followed it.⁹ However, Benediktsson rightly points out that in such a situation the correct thing to do is assign responsibility for the minimal contrast to the unaccented syllable;¹⁰ therefore we should posit *bere* 'I may bring' = /bere/ as opposed to *beri* (for older **bæri*) 'I may strike' = /beri/, and often likewise with /u/ and /o/ to give a system (for some dialects of Old Norwegian at least) of 5 unaccented vowels. He further notes that of course much of the time vowel harmony does follow the new distribution of /e/ and /æ/ when disrupted, for instance, by raising before nasals. However, such putative five-way vowel systems must have

7. 1987:45.

8. 1978:84-93, espec. 1978:89.

9. 1907:31.

10. 1964:98.

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been remarkably short-lived if they existed at all. Already in AM 315 e fol, a fragment of the Gulatingslov from c. 1240, we find virtually complete coalescence of accented **e* and **æ*, and although vowel harmony is generally very regular in the manuscript as a whole, the text exhibits complete confusion of <e> and <i> in unaccented syllables after /e ~ æ/, thus giving no signs of a five-way vowel system here.¹¹

9.1.2.3. *U-umlaut in unaccented syllables.* The example of Norwegian vowel harmony is interesting, but it could plausibly be argued that such phenomena are purely dialect specific and that they do not constitute any evidence against assuming a three-way vowel system for the Old Norse of, say, the Viking age. A more effective example, since its genesis undeniably lies in the pre-syncope period, concerns the development of *u*-umlaut in unstressed syllables. As presented by Noreen the reflex of **a* subject to *u*-umlaut in unaccented syllables is thought to be the unit *u* with the medial stage **-q-* apparently supplied purely as a theoretical concession.¹² However, much evidence suggests that unaccented *-q-* is directly attested.

In the Äldre Västgötalagen the regular forms *daghor* and *nathorþ* have <o> rather than the <u> expected according to vowel harmony, and Pipping suggests that the 'orsaken till den särställning *daghorþer* och *natorþer* intaga är säkerligen den, att *o* här utvecklats ur *w* + vokal vid reducerad betoning'.¹³ It seems clear that these instances of progressive *w*-umlaut in second elements of compounds led to a mid, not high, vowel, and presumably likewise with OI *dqgorðr*.¹⁴ Nevertheless, whilst it is unclear what spectrum of accentual weight could appear on the second

11. Benediktsson 1964:99-101.

12. 1923:§78 and §148.

13. 1912:3.

14. If so, then the use in Benediktsson 1962:13 of Þjóðólfr Arnórsson's rhyme *Sigurðar kom norðan* to illustrate the phonetic nature of the unaccented unit **u/o* is unjustified; see Skj. I:376, *Sexteffa* 29 l. 4.

9.1. The short vowel system

elements of obscured compounds, it is possible that some degree of secondary stress may be assumed here, and therefore this data has more in common with the *u*-umlaut seen, for instance, in half-stressed syllables such as *gefǫndum*.

On the other hand, there are also instances of *u*-umlaut where it is less self-evident that any significant degree of secondary stress can be assumed. For the Codex Regius, Lindblad notes that 'som huvudregel för R gäller, att gammalt *u* i avledningsändelse stavas med tecken för *u*-ljud (v el. ngn gång *u*) men att labialomljutt *a* i suffix återges med *o*.'¹⁵ There is clear evidence, then, that any Old Icelandic normalisation of forms like *heilǫg*, *skipǫn* to *heilug*, *skipun* is unjustified, or at least anachronistic,¹⁶ and this is borne out by spellings in OI manuscripts along the lines of *elscǫpo*, *avflavþo* for normalised *elskuðu* and *qfluðu*.¹⁷ The common explanation is that forms like *heilǫg* betray a secondary accent on the final syllable, and as this accent is lost, so it is replaced by *heilug* which corresponds to the regular three-way vowel system.¹⁸ However, aside from these very phenomena there are only very limited grounds for assuming suffixes like *-ag/-ug-* carried a significant degree of secondary accent in Old Norse. Given this, it is worth asking what sort of explanatory power Kock's account of the fluctuation between *heilǫg* and *heilug* actually has.

15. 1954:178.

16. Such a distinction is often more difficult to trace outside Old Icelandic, since the unaccented <o~u> variation is frequently adopted elsewhere to represent fluctuation due to vowel balance or vowel harmony.

17. See Kock 1918:13, although his reference to forms from AM 645 4° is less than convincing, since the data in Larsson 1885:xlvi-xlviii shows that original unaccented *u* is also spelt <ǫ> or <ø> in this manuscript, most frequently in the oblique cases of feminine *n*-stems when followed by the definite article as in *rekiqNe*, but also in verbal forms like *megøt* and others. On the other hand, the forms like *aflaupþo* quoted by Dahlerup 1880:x are possibly more significant, assuming that his presentation is representative.

18. See for instance Kock 1918:17.

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To take a non-accentual tack, it is notable that instances of OI *-q-* in unaccented syllables are always in morphophonemic alternation with *-a-*. Rögnavaldsson argues for modern Icelandic that the *u*~*ö* distinction is neutralised in non-root position, i.e. that they are merely allophonic variants of one another, although he has difficulty formulating the relevant environments.¹⁹ This can be readily adapted for early Old Norse, where we find that the unaccented vowel triangle is indeed a valid description on certain phonological levels, but not on others. If we posit an identical *u*-umlaut rule for unstressed as for stressed syllables, then an underlying sequence /*elskaðu*/ gives the attested *elskøðu* whilst the undeniable further transition to *elskuðu* (possibly originally only in a lower register?) restores the three-way system on the phonetic surface. Admittedly for variation such as in *heilagr*, *heilög* this means that we must reckon on a morphophonemic rule which introduces allophonic variation into the syllable, but can I see no particular contradictions with such a position.²⁰

9.1.2.4. *Conclusion.* In real terms these sketches may imply the recognition of at least four to five unaccented vowels in the various attested dialects, all of which can appear in identical phonological environments and would therefore appear to be phonemes by commutation. It is not my intention to present any attempt at a definitive solution for these enigmatic phenomena, merely to point out that much remains to be understood and that to dismiss anything outside *a*, *i*, and *u* as an indication that the syllable is not really unaccented is too simplistic a generalisation.

19. 1981:32-36.

20. Unfortunately I have been unable to find any reflex of Old Norse *u*-umlaut in unaccented syllables which does not participate in allomorphy with *-a-* to act as a control. The *r-* and *n-*stems exhibit in their oblique cases no clear signs of containing anything other than the *u* member of the unaccented vowel triangle, but this is probably to be attributed to Northwest Germanic raising rather than Nordic *u*-umlaut, see above §7.11.3.

9.2. The long monophthongal vowel system

9.2. *The long monophthongal vowel system*

We can conclude from the earlier sections that we can identify with relative security at least three urnordisch inherited long monophthongs, and one more can probably be added on other grounds.

Firstly, there is the unit *ō*, represented generally by <o> in the *ō*-stem nom. and acc.pl. and the formative syllable -*op*-/-*od*-. The etymology of this vowel is generally Germanic **ō*, and as can be seen already in KJ 97 Björketorp *runar* it collapses with *a* at shortening. On this basis we can also include the *ō*-stem acc.sg., at least as attested in the adjectival declension, and gen.pl. in this category. On the other hand, the 1st pers.sg. weak preterite ending is not attested uniformly with -*o* but also apparently once in -*a* and once in -*e* respectively; however, it seems possible that there are external grounds for this fluctuation (cf. §8.5). If any of the *n*-stem nom.sg. forms in -*o* or oblique sg. forms in -*on* are in fact to be analysed as the predecessors of the ON feminine endings -*a*, -*u*, then this evidence too may well fit in here.²¹

Secondly, there is the unit *ī*, represented generally by <i>, probably in the -*ig*- and -*in*- formative syllables. If the forms KJ 50 Strøm *skapi*, *ligi* are finite verbal forms as seems most likely, then it is quite possible these reflect urnordisch *ī* from the proto-Germanic sequence *-*ij*-, but as noted above (§8.4) this is difficult to demonstrate either way. On comparative grounds, the presence of a unit *ī* within urnordisch is confirmed by other morphemes which happen not to be attested, such as the *i*-stem nom.pl. and the verbal preterite subjunctive endings.

Thirdly, there is the unit *ī* designate *æ*, where it is possible that we can identify a chronological progression in representation, although secure evidence for this is admittedly not easy to come by. Above (§7.12.5) I argued that KJ 76 Opedal *swestar* was an example with the less common representation <a> facilitated by the following liquid. Aside from that,

21. As do probably the results of the monophthongisation of etymological **au* as attested in KJ 60 Vetteland *magor*, see above §5.4 and below §9.3.

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only the various reflexes of the 3rd pers.sg. weak preterite ending supply direct evidence for an etymological monophthong, and here it seems that the various spellings in *-a*, *-ai*, and *-e* indicate that there was no direct mapping between the phonetic value of the unit *ǣ* and any individual rune (cf. §8.6.2). It is for this reason that I assume a vowel of phonetic value possibly more similar to [æ] than [e]. The growing dominance of forms in *-e* after the earliest layer of evidence seems to show that this vowel became ever more closely identified with the unit /e/ in stressed syllables, i.e. was phonetically raised to [ē].²²

Fourthly, it seems likely we should reconstruct a unit *ū* for urnordisch also. This may be attested directly in the formative syllable *-uk-* (§7.8), but is in any case evident from theoretical arguments regarding, for instance, the *ō*-stem dat.sg. ending (§5.7) and possibly also the stem syllable in the fem. *n*-stem oblique cases (§7.11.5).

Having found no evidence for an urnordisch unstressed equivalent of accented *ā*, it follows from the above that I reconstruct the early urnordisch unaccented long vowel system as /ī/, /ū/, /ō/ and [ǣ], the last of which could at first be identified either with accented /ē/ or /ǣ/. The poor fit here between the accented and unaccented systems may well be related to the advent of the phoneme known widely as Germanic **e*². In most of the attested Germanic languages, the reflexes of Germanic **e*¹, i.e. IE **e*, show a tendency to be lowered and end up as something approaching [ā].²³ Whilst the origins of Germanic **e*² are still shrouded in mystery, both its

22. Much the same course of development appears to apply to the results of monophthongisation of earlier **ai*, though here forms in <a> are not convincingly attested, the regular monophthongal representation being in <e>, see below §9.3.

23. Except in Gothic where **e*¹ shows no sign of lowering either in accented or unaccented syllables. However, despite the statements in grammars such as Braune ~ Ebbinghaus 1981:§6a that in Gothic **e*¹ and **e*² coalesced in *-ē-*, there is no evidence to suggest that Gothic did not simply inherit from its particular branch of Germanic a single phoneme **e*. As for the Anglian dialects of OE, it may be assumed that the monophthongisation of Germanic **ai* to **ā* would have limited the phonetic space available for Germanic **e*¹ to be backed.

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marginal status in terms of distribution, and the fact that almost all the significant evidence for its existence comes from only one dialect, Old High German, imply that it is a late and possibly in essence an *einzel-sprachlich* development.²⁴ In terms of distinctive features, it may be suggested that with the addition of * $\bar{e}^2$ there was a concomitant increase in the number (or perhaps rather complexity) of the distinctive features operative in the vowel system. There was, however, no such increase in terms of the features specified for unaccented syllables.

9.2.1. *Some distinctive feature theory.* For classical proto-Germanic prior to vowel harmony, a four-way vowel system is usually reconstructed, in traditional terms * $i/\bar{i}$, * $e/\bar{e}$, * $a/\bar{o}^{25}$ and * $u/\bar{u}$. This symmetrical system can be defined with the use of just two distinctive features, namely [front] and [high].²⁶ The main structural changes in the course of development into urnordisch appear to have been;

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24. For instance, Grønvik 1981:59-60 argues that no phoneme * $\bar{e}^2$ can be assumed for either proto-Germanic or Northwest Germanic, but rather that it must be an independent innovation at the point of break-up. Aside from the single word * $h\bar{e}r$, there is no Germanic common ground for the presence of * $\bar{e}^2$. Regarding the seventh class of strong verbs, it can be noted that, for instance, the Gothic parallel *haihait* to the * $\bar{e}^2$'s in OE *hēt*, ON *hét* does not show this vowel grade, but rather mirrors the root vowel. This is also the case whenever Gothic - $\bar{e}$ - does occur in strong preterites as in *saislep*, and such instances cannot therefore be considered examples of original * $\bar{e}^2$ in the preterite of class 7 verbs. The best way to explain *hēt*, *hét* seems rather to assume lengthening of the vowel of the reduplicating syllable when reduplication was given up, a loss which was probably partially phonological, partially morphological.
25. Possibly closer to [ɔ], [ɔ:].
26. Although [back/round] and [low] would appear to be just as viable. This seems a preferable method of classification to that seen, for instance, in Antonsen 1970:317, according to which length is partially redundant, and which requires greater complexity in its distinctive features to express the same number of basic units, eight. A non-redundant qualitative distinction between, for instance, /a/ and /ɔ/ seems difficult to justify, and I believe is caused by unnecessarily placing too much faith in the idea that the symbols used by phonologists for phonemic reconstruction bear a decent resemblance to those in the IPA.

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i) the splitting up of **a* and **ø* and the arising of a new short vowel **o* by vowel harmony,

ii) the origin of a new long vowel **ē²* (by whatever means) as a partner to **e*, and

iii) the drift of **ē¹* to become the new long partner of **a*, henceforth **ā*.

Naturally, these do not necessarily reflect the actual chronological order.

For *urnordisch* this gives us the classic accented five-way vowel system **a*, **e*, **i*, **o*, and **u*, all of which could occur both short and long. Despite the fact that typologically this appears to be the simplest, or at least most representative, vowel system known to man, a satisfactory description of it in terms of feature theory is surprisingly difficult to obtain. A classification using both [high] and [low] would do the job,²⁷ but seems to be theoretically less desirable than a *n*-ary rather than binary height feature with a spectrum of values from 1 (i.e. low **a*) to 3 (i.e. high **i* and **u*). However, for both of these an objection could be raised in that it does not account for the overwhelming predominance of systems where there is no [front~back] contrast in the low position. Again, the autosegmental approach looks promising,²⁸ but it could be argued that a binary distinctive feature by its nature needs to be privative, and that use of an equipollent feature²⁹ is in some sense cheating. These theoretical issues are not easy to resolve, and accordingly it is not easy sometimes to use feature theory to shed light on other phenomena to any convincing degree.

Whatever the position adopted on these points, one thing is clear from the reconstructions as sketched above. The arising of a five-way vowel system led to the polarisation of the new opposition **ē ~ *ā* in stressed

27. Cf. Lass 1984:79.

28. As outlined by Goldsmith 1990:300-02.

29. A feature which can be defined as positive, negative or remain functionally undefined; see Goldsmith 1990:245-46.

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syllables whereas no such innovation took place in the unaccented system. Therefore, the unaccented version of Germanic **ē*, here designated as a compromise **æ*, remained ill-defined, possibly only by the features [-round/ -back] and [-high], and so was free to vacillate between the bundles of distinctive features which made up *urnordisch* /*ẽ*/ and /*ǣ*/ by virtue of its being underspecified. Whereas the binary height distinction was complicated into a three-way spectrum to distinguish, for instance, stressed **ī*/ from **ē*/ (i.e. **ē*²) from **ā*/ (i.e. **ē*¹), in unaccented syllables this remained a binary opposition of [high~low]. Thus **æ* was defined solely by the features [-high, -round/ -back], which applied equally well both to accented **ē*/ and **ā*/, and so it could be identified with either.³⁰ This fits in well with the observation that as a general principle vowels in unaccented position tend to be less defined than vowels in accented.³¹

In conclusion, I will just note that the idea of the unaccented vowel system being defined by only two distinctive features also fits in well with what has been established concerning the short vowels. Here no units **e* nor **o* can be discerned, and the resulting three-way system **a*, **i*, and **u* can be economically defined in the terms posited.³²

9.3. Diphthongs

There are few questions more vexed than those concerning the presence and nature of Germanic diphthongs in unaccented syllables. It has often proved tempting to deny the reality of unstressed diphthongs in any of our

30. On the other hand, unaccented **ø* was specified by the features [-high, +round/ +back] and therefore was clearly distinguished from accented **ā*/.

31. Cf. the widespread modern European tendency to level unstressed vowels to [ə], surely the ultimate in undefined vowels.

32. Therefore, if the data above is correctly interpreted in suggesting an ON unaccented phoneme *ø*, then this could be seen as providing the [+round] counterpart to *a*, both of which would be [-high].

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attested Germanic languages,³³ seemingly in the belief that this is sound method. It seems uncertain to me why this should be so. There are digraphic spellings attested throughout Gothic, urnordisch, and, at least in medial syllables, Old High German, looking for all the world like inherited diphthongs exactly where we would expect them on etymological grounds. Before moving on to the attested runic evidence, it is therefore worth examining on what grounds this sceptical attitude rests, and whether there are any typological reasons for denying the existence of unstressed diphthongs in the Germanic dialects.

To be fair, the OHG evidence is the least relevant, since the retention of medial diphthongs is usually attributed to secondary stress upon the relevant syllable, and it is clear that in final syllables monophthongisation was complete. Nevertheless forms like *arbeit(i)* ‘work’ and *ameizsa* ‘ant’ clearly show retained non-root diphthongs, and although this may be related to the degree of secondary accent on the syllable, it is notable that in NHG neither of these forms has undergone the shift of stress common in other forms with late accent, e.g. NHG *Arbeit*, *Ámeise* vs. *Hannóver*, *lebéndig*. Nor are there any clear grounds for a morphologically assigned secondary accent in these examples, as they are scarcely etymologically transparent or productive suffixes. Therefore the rationale must essentially be that these non-root syllables retained diphthongs because they were sufficiently accented, and the only reason they were sufficiently accented is because they contained diphthongs. This is scarcely tight reasoning.

The Gothic evidence seems on first acquaintance to be even more persuasive since apparent diphthongs are preserved in both medial and final desinential syllables. However, although it has now become more popular to assume that the digraphs in forms like *anstai*, *sunau* represent long monophthongs, usually something like *ǣ and *ō, rather than the diphthongs assumed by most early scholars, it is notable how little evidence

33. For example Prokosch 1939:§49 k.

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there is available to argue for or against either case.³⁴ Despite assertions from both sides, almost all of the arguments are purely circumstantial and give only a very tenuous and oblique grasp on the problem. If nothing else, the case put forward by d'Alquen demonstrates to my satisfaction that no convincing arguments can be brought forward to deny the possibility of diphthongs in unaccented syllables in Wulfilian Gothic.³⁵ Whilst it is true that their existence cannot be definitely proven either, this is unfortunately always the state of affairs in historical linguistics. All we can hope to do is build up a reasonable weight of probability, and as such, given the absence of convincing counter-evidence, I feel the most natural and intuitive approach is to assume spellings like *sunau(s)*, *anstai(s)* represent retained inherited diphthongs.

If either Gothic or even just proto-Germanic tolerated diphthongs in unaccented position, then it does not seem impossible that urnordisch did as well. It is, after all, generally accepted that urnordisch had a binary length distinction which applied to vowels in unaccented as well as accented syllables. Therefore, if we can analyse unaccented **-i-* as /-i-/ and **-ī-* as /-ii-/ , it is plainly acceptable to the phonological system of the period for the nucleus of an unaccented syllable to contain two morae.³⁶ It lies near at hand to suggest that an unaccented syllable containing /-ai-/ , /-au-/ , /-iu-/ would be equally as acceptable as those with /-ii-/ , /-uu-/ unless there are arguments available to the contrary. As it happens, many approaches work under the impression that long monophthongs are somehow more basic than diphthongs, and that therefore a language which was busy limiting the number of contrasts in unaccented syllables would not tolerate diphthongs

34. The explosion of the monophthongal view in the 1950s is represented, for example, by Hamp 1956 and Jones 1958; the essentials are summarised in Marchand 1973:74-76.

35. In particular the summaries 1974:19-33, 161-66.

36. See Árnason 1980:188-91; at least some, but certainly not all, of the criteria noted there for the analysis of length as gemination seem to apply to urnordisch, although it seems unclear to me why many of them should actually favour this particular

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in this position; but this feeling is easier to grasp intuitively than to state formally. It is striking that in North and West Germanic diphthongs tend to become monophthongs which share the properties of their respective elements; so **ai* probably develops to something approaching **[æ]* or **[ē]*, combining the properties [-high] with [+front], and likewise **au* seems to pass through a stage **[ɔ]* or **[ō]* which is both [-high] as well as [+round]. This may indicate some form of a suprasegmental spread of features which each come to typify a whole syllable rather than an individual segment, whereas those features within each element which are incompatible are lost. However, under a standard phonological analysis each diphthongal segment in an unaccented syllable is defined separately, each corresponding (presumably) to one phoneme, and it is clearly permissible to have heavy unaccented syllables with branching nuclei. With diphthongs in the accented syllables providing a clear model to follow, it is therefore not easy to justify why unaccented diphthongs should prove so awkward. A useful model to illuminate this problem may be the autosegmental perspective where long vowels are simply short vowels, i.e. are specified as single segments, which happen to be linked to two slots on the skeletal tier where quantity and syllable division are defined.³⁷ It seems typologically established that geminate consonants, at least, are often allowed in positions where other consonant clusters do not appear. This could be adapted for our purposes to explain why the North and West Germanic dialects eliminate diphthongs but retain long monophthongs in unaccented position.

Above I discussed three instances of suggestive digraphs, namely KJ 13a Nøvling **talgidai** (§8.6.1), KJ 99 Möjbro **haha(i)** (§5.1.1), and KJ 136 Tjurkö **kunimudiu** (§5.5.1). Since all other instances of etymological diphthongs were represented by single graphs, it was assumed that these indicated a monophthongal stage, but it is in fact difficult to put much trust

analysis over any other.

37. Goldsmith 1990:48,76-82.

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in the idea that even these recorded digraphs represent diphthongs. To begin with **ai*, KJ 99 Möjbro **haha(i)** is evidently very uncertain as regards word-division, and even if the interpretation favoured above is accepted, then we appear to be left with a dat.sg. ending either in **-a** or **-ai**, neither of which is attested elsewhere. An undeniably more obvious example of an unaccented diphthong is KJ 13a Nøvling **talgidai**, but I argued above with the support of Udby **talgida** that this spelling could equally well have represented a long monophthong. Although I think a case has been made out for multiple representation of this ending, there is no real reason to assume that any monophthong generated from Germanic **-ai* could not have been represented by **-a** as easily as the direct reflex of Germanic **-ē*. Nevertheless, although it is impossible to claim that **talgidai** definitely does not represent a diphthong, I think the balance of probability points to an inherited monophthong here, represented variously in KJ 13a Nøvling **talgidai**, Udby **talgida** and KJ 30 Garbølle **tawide**.

As for KJ 136 Tjurkö **kunimudiu**, this is probably the clearest example of an etymological diphthong represented by a digraph, even if its identification as a dat.sg. might seem to be based rather too squarely solely on a formal phonological analysis. The main problem with this form has been the fact that scholars have been forced to stretch their credulity to put faith in an apparent unaccented diphthong on a bracteate from the second half of the fifth century.³⁸ There are however no real grounds for not treating the form as genuine, nor is it obvious what a digraph **-iu** might be intended to represent except for a diphthong **-iu*.³⁹

It is apparent that convincing direct evidence for the diphthongs **-ai(-)* and **-au(-)* in urnordisch unaccented syllables is not to be had. In the absence of any indications to the contrary, it seems that there is much to be said for the traditional assumption of a chronological development from

38. Dated so in Grønvik 1987:§27.2, although rather later to c. 500 in KJ:274.

39. An alternative might be to interpret this as a final disyllabic sequence, but I can find no support for such a proposal.

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**ai*, **au* to **ē*, **ō* respectively. Although above (§5.4) I noted that it would be convenient to assume that the two diphthongs **ai* and **au* underwent monophthongisation at the same time, there are no urgently pressing reasons to pursue the point. Therefore, the fact that no instances of original **au* appear in diphthongal form is essentially irrelevant to the question of **ai*, especially given the paucity of attestations. On the other hand, despite the reservations expressed about our recorded instances of *-ai*, there is nothing within a relative chronological framework to rule out their being genuine attempts to represent surviving diphthongs. The question must remain open as to whether we can actually reconstruct diphthongs in the inscriptions in question.

Nevertheless it cannot be denied that for the bulk of the urnordisch runic tradition monophthongal forms appear to be the rule, so for **ai* KJ 27 Kragehul spear-shaft **haite**, KJ 29 Lindholm **hateka** (with possible corruption due to affixation of the pronoun), KJ 70 Järsberg **hite**, KJ 72 Tune **woduride** (probably) and **(a)sijoster** (possibly), KJ 76 Opedal **wage**, KJ 127 Seeland 2 **haitika** (as with Lindholm), and KJ 136 Tjurkö **walha-kurne**, whilst for **au* only KJ 60 Vettelund **magor** is attested. It seems, therefore, that if we assume KJ 136 **kunimudiu** represents a genuine diphthong, then final **-iu* may well have survived intact as a diphthong longer than did its partners **-au* and **-ai*. This might be attributable to the fact that, in phonological terms at least, the respective elements in the sequence */-iu-/* were more similar than in the other diphthongs, and there was no compromise phoneme to act as a medium for monophthongisation.

To sum up, I have argued that typologically diphthongs would not be unexpected in urnordisch, but that unfortunately the evidence only gives us unambiguous, albeit slight, evidence for **iu*. If **ai* and **au* were present in unaccented syllables in early urnordisch, and there are some slight pointers for **ai* at least, then during the period they were monophthongised to **ē* (so probably collapsing with the unit reconstructed above as **[æ]*), and **ō* respectively.

9.4. Quantity and the peculiarities of distant unaccented syllables

9.4. *Quantity and the peculiarities of distant unaccented syllables*

Several times so far I have invoked the notion of abnormal loss or reduction in certain unaccented syllables which were divided from the root by an intervening unaccented syllable, i.e. normally were in the third syllable of a word.⁴⁰ Although for current purposes this has usually involved explaining how a reconstructed urnordisch long vowel came to be apocopated, it is a question of more general relevance to Germanic. The fate of short vowels inherited from IE in third syllables has always aroused great confusion, and possibly as a result rather little actual attention.

The general belief appears to be that at least sometimes Germanic **i*, **u* and probably also **a* were lost early in third syllables, prior to the dialectal syncope which signalled the end of the nominal stem vowels.⁴¹ Apposite cases would be the inflectional endings of the *r*- and *n*-stems, the dat.pl. marker *-miz* following on from the stem vowel, and the 2nd/3rd pers.sg. present verbal endings in **-si/-zi*, **-pi/-ði*. Following on from this, much analogical restoration needs to be assumed to explain the retention of stem vowels in forms like Gothic *þiudinassus*, the oblique cases of consonant stems giving OE *milc* alongside *meolc*,⁴² the *i*-umlaut in ON nom.pl. *gefendr* from **-andiz*, and KJ 61 Kalleby *haitinar*. In addition, the absence of syncope in forms like Gothic *bairis*, *bairip* is awkward if we assume that apocopated forms had already developed in proto-Gothic, since the discrepancy in development between *(*)bairis* and **gastis* > *gasts* is then difficult to explain.⁴³ Interestingly, an abnormally early loss of the IE

40. See especially above §7.11.3, for examples also §6.1 and §8.2.1.

41. See, for example, Streitberg 1896:§144 and Jellinek 1891:16-18.

42. Campbell 1959:§331,3.

43. Although it should be noted that there is a distinct tendency in all the dialects for final syllables which were previously medial to avoid loss, whether due to some kind of secondary accent or to other unknown features. Thus Gothic *bairis* is in good company along with ON *bróður*, *hana*, inf. *nema*, OE *hanan*, inf. *niman*, Angl. *beodeð* etc.

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primary verbal ending **-i* has often been posited for the closely related branches of Italic and possibly also Celtic, but naturally it does not necessarily follow that any such loss must be very early in Germanic as well.⁴⁴ It would be prohibitive to go into all the ramifications of these developments for the Germanic language group as a whole, but it seems useful to give a better justification of the proposal raised above (§7.11.3) which attempts to tie some of these developments together.

9.4.1. *Recourse to the morphemic structure.* It seems plausible to set up three different levels at least on which early reduction of unaccented vowels in syllables separated from the root can operate, and I will distinguish them by marking the morpheme boundaries.

The first is where the unaccented syllable followed a polysyllabic root. Good examples are not only pure disyllabic roots such as Germanic **magap/i-* (cf. OHG *magad*), or **haubið/a-* (cf. Gothic *haubiþ*), but also endings following formative suffixes such as **slagĭn/a-* (cf. KJ 99 Möjbro *slaginar*), where it seems likely that no reduction of the inflexional syllable took place any differently from forms with monosyllabic roots. Although I am aware that any rigorous treatment would view suffixes like **-in-* as separate morphemes, the analysis proposed here is not one of morpheme theory in its pure form but rather more vague and eclectic. Two features of a form like **slagĭn/a-* differentiate it from the other two classes I will propose. Firstly, although {-ĭn-} is undoubtedly a separate productive morpheme, it runs through the entire paradigm of the form with no apophony. Secondly, it is productive lexically and so creates independent entities rather than being a suffix with a purely grammatical function.⁴⁵

44. Cowgill 1975:56-57.

45. This presupposes viewing the ending **-ĭna/-ana-* not just as a grammatical marker of the past participle; the views expressed here are possibly more valid for the nominal use of the suffix as in ON *himinn*.

9.4. Quantity and the peculiarities of distant unaccented syllables

The second class is where a form can be divided into three clearly distinct functional morphemes. In some instances, such as the case of the past participle of strong verbs, this merges to some extent with class I, but the difference is that class II forms cannot be viewed simply as polysyllabic roots, since the additional morpheme is purely grammatical. Here I would place the comparative and superlative degrees of adjectives and adverbs, and also weak preterites like **rais/ið/a-*.⁴⁶

The second class forms the middle ground between the first, which comprises polysyllabic roots, and the third, which comprises polysyllabic endings. Here I would place the Germanic synthetic medio-passive as in the 2nd pers.sg. **hait/lizai* where the medial **-iz-* has no function independent of the final **-ai*, the dat.pl. endings in **-umiz*, **-imiz*,⁴⁷ and the infinitive in **-ana(n)*; these can only be seen functionally as polysyllabic morphemes. It seems reasonable that this class of endings should be less resistant to reduction of their final syllable than those of classes I or II.

Of course, this is to some extent an intuitive system of classification, but it seems to be borne out by the evidence. For all of the morphological endings in class III abnormally early reduction must be assumed, whereas the opposite can plainly be demonstrated for forms in class I.⁴⁸ The basis of these distinctions could be viewed as phonological and due to differing degrees of phonetic accent, or as morphological and due to an awareness of the functional significance of the parts of the inflectional endings. It is probable that these would have operated in tandem; only a morphological awareness can adequately explain the evident functional distribution, but it

46. The distinct classification for the two Germanic past participial formations is partly due to the fact that the weak suffix **-ið-* is generally only grammatical whereas the **-an-/īn-* suffix is also productive nominally, as in ON *þjóðann* and *himinn*, but also because the past participle in strong verbs is also usually marked by the different vowel grade in the root.

47. Where common Germanic loss seems to be attested in the tribal names *Aflims* and *Varvims*, see Schönfeld 1911:3,259.

48. On the other hand, the distinction between classes I and II is as much theoretical as derived from consideration of the evidence.

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seems simpler to argue that this extended itself onto the phonetic level in the form of stress patterns, since otherwise we must reckon on changes on a very abstract level.

The *r*- and *n*-stems pose, not unusually, a quandary here. For the *r*-stems, at least, early loss of inflectional endings in the third syllable is a common assumption, but under my analysis they are better placed in class I and so should preserve their inflections intact. However, two points can illustrate the marginal nature of this evidence. Firstly, the original inflections proper to the *r*-stems were those of the athematic roots which did not survive to any great extent in Germanic, and so morphological restructuring may have been likely anyway. Secondly, the idea that inflections were lost early in this nominal class is only necessary to explain forms like OE nom.pl. *brōþor* with no *i*-umlaut, but this approach raises as many problems as it solves. For Old English, at least, the plural inflexion in *-u* which Campbell dismisses as of uncertain origin can be derived from the acc.pl. **-arunz* if early loss in the final syllable is not assumed.⁴⁹ In addition, the frequent development in ON of forms in *-or/-ur* is more likely to be due to raising in earlier sequences such as **-aru* than a proliferation of IE vanishing grade suffixes.

The *n*-stems are even more difficult to fit within the analysis above. It is clear that the inflectional endings were lost prior to the urnordisch period, although probably still late enough to cause raising in *n*-stem acc.sg. forms like OHG *hanun* and OE Northumbrian *ġalġu* from **-anu*. The first assumption is that the *n*-stems should be classed as polysyllabic roots and so maintain their inflections. However, the *n*-stem declension was productive in Germanic not just for purposes of word-formation but also grammatically in differentiating definite from indefinite adjectives. In addition, it was noted above that within class I types the derivational suffix typically remains stable throughout the paradigm, which is certainly not the case with the *n*-stems where the nom.sg. probably had no final **-n*, there

49. Campbell 1959:§631, cf. Hollifield 1984:37 plus footnote 18.

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was apparently Germanic apophony between, for instance, acc.sg. **-an-* and gen./dat.sg. **-in-*, and where it seems uncertain when the gen.pl. **-nō* and dat.pl. **-num* forms were replaced by regular **-anō* and simple *-um*. It is therefore impossible to place the *n*-stems conclusively; in fact, the nature of the classification proposed here means that they merge into all the classes, since to judge from the apophony in the *n*-stem onto which the desinence was added, it would be possible to argue that forms like acc.sg. **-anu(n)* were coming to be seen as disyllabic case markers in their own right.

9.4.2. *So long or short?* If this is allowed, then it follows that the irregular equations in, firstly ON *heitir* compared to Gothic *haitaza*, *haitada*, OE *hatte*, and secondly ON *blindan* alongside Gothic *blindana*, OE *blindne*, can be seen as the result of urnordisch reduction in the environments described above. The evidence suggests that, whereas abnormal loss of short vowels in such positions may have been common to Germanic, shortening of long vowels and diphthongs is specific to urnordisch, at least compared to Gothic and Old English. It only remains to decide what the status then is of the sole attested relevant form, KJ 75 Kjølevik **minino**. Among the several options are a) that the length distinction was non-operative in this position and so therefore the vowel cannot be classed as a member either of the long or the short subset, b) that this form is prior to the posited shortening, c) that in this position final long vowels were apocopated irregularly, or d) that the form is subsequent to shortening. Aside from the fact that the first alternative looks to be a rather indefensible escape route, I can see no viable way to choose between these possibilities, although the fact that no other short vowel has been identified which is represented consistently by *-o* might argue, albeit in rather circumstantial fashion, against d). Although here again a hole must unfortunately be left in the analysis of the corpus of evidence, I hope that this section at least serves to account for the hows and whys of the deficiency.

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9.5. *The transitional period*

Although I do not intend here to deal effectively with the evidence for the transition of urnordisch to early Old Norse, a few comments are in order so as to round off what has been claimed elsewhere.

I have posited an unaccented monophthongal system for late urnordisch of **a*, **[æ]*, **ō*, **i/i*, **u/ū*. The main qualitative development within the urnordisch period was the raising of **æ* to become the long partner of stressed **e*, where it coalesced with the result of the monophthongisation of **ai*. In this way, the unaccented vowel system moved closer to becoming an exactly defined subset of the accented, where all unaccented units had a clear-cut partner in the stressed system (though not vice versa). One not unexpected facet of this shift might have been the arisal of a new unaccented unit **ā*, since above (§5.3.3) I concluded that the arguments for a phonological development of Germanic **-aiz* to urnordisch **-ār* were unable to demonstrate the existence of such a phoneme. However, during the transitional period there were other options open to fill this gap. In particular, it has long been observed that urnordisch final sequences of the form **-Vn#* do not appear to be affected by syncope, contrary to the usual formulation of the development.⁵⁰ The most plausible way to account for this is to suppose that the loss of pre-junctural **-n* added a distinctive prosodic feature to the preceding short vowel that prevented apocope, and the feature most usually invoked is the presence of nasalisation.

50. According to much traditional wisdom, this applies also to forms ending in **-Vr#*, cf. Noreen 1923:§155, but as noted above §7.12.1 this is in fact rather uncertain. The retention of the stem syllable in forms like *fāðir*, *fōður* can be compared to its loss in compounded *-fōðr* and the equally unexpected retention in other forms like 1st pers.pl. *berum*, 2nd pers.pl. *berið* etc. Some at least of these are bound up with the complex issue of early loss of vowels when separated from the root by an intervening unaccented syllable, see above §9.4.

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9.5.1. *Incipient nasalisation.* Indeed, the assumption of such a feature receives tentative support from later sources, where runic inscriptions in the younger futhark sometimes use the *óss*-rune for older **-an* sequences in infinitive forms like DR 296 *stato standa*, U 418 *rito rétta*, SÖ 237 *raiso reisa* and the oblique cases of *n*-stems such as DR 279 *filago fēlaga*, *Fv.* 1952:101 *tiuro Dýra*.⁵¹ On the other hand, it is easy to feel sympathy for the reservations expressed by Noreen that 'bei schwachtonigem vokal vor geschwundenem nasal ist [...] nasalierung überhaupt nicht zu belegen, indem schon die ältesten rschw. denkmäler nur formen wie Rök *stqnta*, *likia*, Herened *kaurua* u. dgl. bieten.'⁵² While it is less comfortable than it might be that the oldest sources do not specifically designate ON *-a* from **-an* with the *óss*-rune,⁵³ the later instances of such usage are so etymologically accurate, albeit sporadic, that there seems little reason to mistrust their testimony.⁵⁴

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51. The many cases of final *-o* for the *a*-stem acc.pl. ending from older **-anr* noted in DR:864-65, such as DR 317 *stino steina*, are obscured for this purpose since they may equally well show progressive nasalisation.
52. 1904:§128,5:a, even if he does specifically admit in §128,1 from forms like ÖG 136 Rök *knuo* (tentatively interpreted) and presumably also KJ 95 Gummarp *staba pria stafa þrjá* that nasality in unaccented position was retained later when the syllable was 'stark nentonig' in hiatus.
53. Such as those noted above and also the Setre comb inscription, cf. §7.13.1.
54. Although it is not easy to find attested forms in final *-a* which do not come from earlier **-an* to act as a control in the relevant inscriptions, *Fv.* 1952:101 *sina* (fem. acc.sg. from urnordisch **-ō*) alongside *tiuro* at least may testify to a nasality distinction, cf. Williams 1990:49-50. The only real difficulty with the assumption that *-o* in these forms represents */-ā/* stems from those few instances where the rune is used for vowels which were definitely oral, the best example of which appears to be DR 121 *harþo*, even though the following text seems to be corrupt which might cast some doubt on the form; cf. also Williams 1990:78,80. However, such examples are so few and unreliable that to my mind they cannot disprove the idea of retained nasality in final syllables, any more than the frequent use of the *óss*-rune for oral */a/* in accented syllables can prove that nasality could not exist there.

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But is it in fact sufficient to assume that nasalisation would preserve a vowel from apocope? In stressed syllables loss of **-n-* before both morpheme junctures and fricatives usually entails lengthening of the preceding vowel, as in the negative prefix *ú-/ó-* and the name of the *óss*-rune itself, but some surveys have tended to view the traditional Neogrammarian concept of compensatory lengthening as no more than a convenient metaphor.⁵⁵ Autosegmental phonology seems to offer a neat and convenient treatment of the development, where it can be seen simply as reassociation of the elements in the phonemic and skeletal tiers. Therefore, for ON *ás-* from **ans-* the post-vocalic element in the skeletal tier is reassigned, giving

a n s u-	reanalysed as	a s u-
		/ \
V X C V		V X C V,

and so leading eventually to the new phonemic sequence **/aasu-/*. This involves the recognition that the segment *X* in the skeletal tier does not have to be specified as consonantal or vocalic, but can merely function as one mora of length within the syllabic rhyme. In terms of the urnordisch final sequence **-an#* we might then reckon on */-aã/* or */-ãã/* at the time of syncope, where the final long vowel would not be subject to apocope.⁵⁶

This gives a sketch of how urnordisch on the verge of the transitional period could have developed a full-fledged five-way unaccented long vowel system, albeit with slightly imperfect distribution in that **ã* could only

55. For example, de Chene and Anderson 1979:530-31 insist that there is no evidence for 'an independent mechanism of compensatory lengthening', but rather that a prior stage such as diphthongal development via a fricative or glide must be present with subsequent monophthongisation.

56. The same would presumably apply also to **-in#*, **-un#* giving ON *-i*, *-u* respectively. Although here we have no direct evidence for nasalisation, it might well be lengthening rather than nasalisation which was responsible for the preservation of the syllable. However, it seems quite plausible that in the Viking age final **-i* and **-u* could exist as nasalised variants, despite the arguments of Sjöros 1904:211-13; see the reply by Wimmer 1905:45-47 and again by Sjöros 1905:177-78.

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appear nasalised. In fact, it gives the impression of being slightly forced. Given that at this time probably only long vowels could carry distinctive nasality, it might seem more plausible to analyse nasalised vowels as sequences of vowel plus nasal prosodeme, i.e. /-aN-/.⁵⁷ Under such an analysis, however, it might be expected that syncope would strike upon the short vowel in a closed syllable. That it did not is possibly to be ascribed to the fact that sequences *-aC- were generally analysed as a short nucleus plus coda, whereas the putative *-aN- consisted rather of a long nucleus with no coda and so from that point of view was a long vowel in an open final syllable.

9.5.2. *Shortening of long vowels.* In the transitional period when the first signs of syncope begin to appear, there is a qualitative shift in the unaccented vowels, a shift which is usually associated with shortening. Earlier **ǫ* comes to be represented by <A>, as in KJ 97 Björketorp *runar*, and at least according to some viewpoints the distinction between <e> and <i> in unaccented syllables begins to evaporate, possibly reflecting a phonetic raising of unaccented **ǣ*. Unfortunately, difficulties in interpretation tend to render the evidence of the transitional inscriptions often even less certain than for the older period. Aside from the obscure nature of many of the texts, the arisal of the 16 character futhark suggests that certain forms may well be ambiguous, as for instance the unaccented syllable in KJ 127 Seeland 2 *haitika* (cf. §8.2). Elsewhere forms like KJ

57. Much as length is often analysed as a single segment plus length prosodeme, viz. /-a:-/. It seems that the First Grammarian in 12th century Iceland only recognised distinctive nasality in the long vowel subset, but it is possible that in the period prior to his work short vowels might also have developed phonemic nasality, cf. Benediktsson 1972:135 footnote 1. One possible environment was the predominantly West Norse assimilation of *-nt- to -tt- (and similarly with other sequences of nasal plus voiceless stop), and this is perhaps attested in Braddan 3 *fro(k)a Frakka*, if the reading is reliable, see Olsen 1954:191, and if the etymology is in fact in *-nk-. Forms like U 1160 *lipsmoþr* for ON *liðsmaðr* might also perhaps indicate the arisal of distinctive nasalisation due to the dissimilatory development of *-nnr- to -ðr-, but there is the danger here that progressive nasalisation may be responsible, see Williams 1990:64-67.

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96 Stentofte **hagestumr**, unless this medial syllable contains a reduced or parasite vowel, and KJ 97 Björketorp **weladaude**, assuming this is correctly identified as an innovative *n*-stem nom.sg., appear to show etymological **i* represented by <e>. But the classic inscription for such variation is undoubtedly the much-debated text on the Eggja stone.

The traditional reading of KJ 101 Eggja **lat** for ON *land*, for example, was based on the assumption that it was possible to identify confusion between the elder and incipient younger futhark traditions. However, Grønvik claims that rather 'har ikke innskriften noen andre spor av påvirkning fra et yngre alfabet, og det skulle heller ikke være nødvendig å forklare skrivemåten her på den måten.'⁵⁸ His attitude to such matters is shown even more clearly by his argument that the usual interpretation of the forms KJ 101 **suwimade** and **galande** as present participles is unconvincing, since regarding these forms 'er det ikke særlig sannsynlig at skrivemåten skulle veksle i identiske ordformer og suffikser i samme innskrift.'⁵⁹ It has to be granted that the analysis of **galande** as the ancestor of ON *galandi* is not secure given the difficulties establishing word-divisions in this part of the text, but aside from that the positive counter-reasoning is tenuous. Old Norse as left to us in inscriptions and manuscripts alike shows no qualms about adopting exactly such multiple representations as Grønvik mistrusts. Of more relevance is his reading of the sequence KJ 101 **fokl** as **foki** (for the dat.sg. of ON *fok* '(sea-)spray') rather than for ON *fugl*, since this at once removes one of the clearest examples of confusion between the elder and younger futharks and identifies another unaccented vowel within the inscription.

The feature most worth our attention here is that several commentators have ascribed the <e~i> fluctuation in the unaccented syllables of the text to incipient vowel harmony.⁶⁰ It is however difficult to demonstrate

58. 1985b:71,179-83.

59. 1985b:77.

60. For instance Krause 1971 no. 16, Grønvik 1985b:169.

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the existence of vowel harmony from any other evidence prior to the manuscript period, although endeavours in this direction have naturally been hindered by the limited orthographic resources of the younger futhark. Although in his survey of Norse forms recorded in Irish sources Marstrander concluded that '*saalangt materialet rækker er fordelingen av i og e følgelig i fuld overensstemmelse med de nuværende love for vokalharmoni, som derfor kan formodes at gaa tilbage iallefald til begyndelsen av det 9. aarh.*',⁶¹ this is a misrepresentation of the evidence, since his data shows a very confused picture from which no secure conclusions can really be drawn. The only prop in Marstrander's support is the form *erell* recorded in the Ulster Annals for 847, which he argues represents the legacy of urnordisch *erilar*.⁶² However, other reflexes like Irish *iarla* and modern Welsh *iarll* are more in harmony with the later ON form *jarl*, and it seems unsafe to place much trust in this one form given that Irish scribes were quite prepared to substitute *e-* for ON *ja-* (developed by breaking),⁶³ and since it seems equally plausible that the second syllable might be epenthetic in origin.⁶⁴ The transmission of this form into the Irish text must render it a wholly unreliable source of evidence for the qualitative development of vowels in Old Norse unaccented syllables.

61. 1915:83-88, espec. 1915:86.

62. Cf. Old Swedish *Jarill* and see above §7.1.

63. Marstrander 1915:77-78.

64. Marstrander 1915:94 notes that the final consonant cluster **-rl* was not native to the vernacular. Despite the claim 1915:87 that '*erell* [...] kan heller ikke staa for *erll* med svarabhaktisk *e*' but that rather 'kunde norsk *iarl* i høiden føre til ir. **erall*', the vowels of Old Irish unaccented syllables are wholly conditioned by their phonetic environment and this spelling with *-e-* is exactly what would be expected between a palatal first and a neutral quality second consonant; see Thurneysen 1946:§102. Marstrander's **erall* presupposes that both consonants should be neutral, but he clearly reckons that an Irish palatal liquid *r* could develop after a preceding front vowel, see 1915:116.

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To return to the putative vowel harmony in Eggja, the choice of data naturally depends upon the interpretation favoured, but by culling an eclectic choice from the various alternatives we can identify the following relevant forms. For <e>, examples of etymological **ē* or **ai* may be attested in KJ 101 **made**, **sakse**, **lande**,⁶⁵ instances of older **i(j)*- on the other in hand KJ 101 **suwimade** and **galande**. On the other side there are spellings in <i> in KJ 101 **huni**, **wiltir**, **foki** and **lagi**,⁶⁶ all from **ē* or **ai*, KJ 101 **misurki**⁶⁷ from older **ij*-, and lastly **skorin** where the unaccented vowel is of debated origin but according to the theory proposed above (§7.6.5) was possibly **i*. Not all of these readings and interpretations are compatible with one another and some, possibly the majority, are frankly rather suspicious, but a fair pattern nevertheless seems to become evident. After /a/, the mid-variant <-e-> is standard, whereas after high vowels <-i-> appears. On the other hand, <-i-> is also attested after **o* in **skorin**, at least according to most interpretations after short **æ* in **lagi**, and according to Grønvik after **o* in **foki** and after long **æ* in **lagis**; in the first, third and fourth of these examples we would probably expect **e*- according to the normal rules of Norwegian vowel harmony. Parallels within the later manuscript tradition can however be found for all of these features. For instance, the Old Norwegian *Strengleikar* seems to exhibit unaccented -i- after any front vowel in the root,⁶⁸ whilst the principle that

65. But probably neither **snarer** nor the variant reading **snarþir** are reliable, cf. Grønvik 1985b:111. As for Grønvik's reading **harie**, see 1985b:73, this must be considered a doubtful form both on the grounds that it cannot be easily read, and that we would expect the *ja*-stem dat.sg. to be endless in the language of the Eggja stone, cf. ON *her* unless this feature is a later intrusion from the *i*-stem flexion.

66. Although Grønvik 1985b:145 interprets **lagis** as the gen.sg. of the ancestor of Old Norse *lægi*, which would mean assuming the unaccented vowel was from earlier **ij*-.

67. Or **urki** according to Grønvik 1985b:92-94.

68. According to Hødnebo 1984:165-69, although his data shows the distribution is not very regular.

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vowel harmony can be disrupted in favour of *-i-* in closed syllables has been noted in various texts.⁶⁹ The rules for vowel harmony within the Eggja inscription can therefore be seen as internally consistent, but with such a small sample this is no real surprise given the large number of variants on the same theme which are later attested to choose from. In addition, it must cause some uneasiness that only <e> and <i> seem to fluctuate in this fashion but not <u>, cf. KJ 101 *solu* and possibly also *-seu*. Nevertheless, it remains probable that these forms do, tentatively at least, point to some form of vowel harmony.

According to Grønvik the distribution implies that these final vowels had already been shortened.⁷⁰ Since this further leads on to the question of how they could then have been discerned from those short vowels which were not to be lost after short syllables for another century or more, he concludes that the Norwegian accents 1 and 2 must already have been in existence to distinguish between, for instance, nom.sg. **wīnir* and nom.pl. **wīnir* giving the Eggja stage **wīnir*, **wīnir* and so ON *vinr*, *vinir*. This is a fundamental series of conclusions to draw from the evidence of a few, often rather dubiously interpreted, forms in a single text. Firstly, as Grønvik admits,⁷¹ it is merely an assumption that only short vowels could have been governed by vowel harmony principles in this fashion. The difficult forms on the Strøm whetstone KJ 50 *wate*, *skapi* and *ligi* noted above (§8.4) would be admirably explained by making appeal to vowel harmony, yet since this inscription retains stem vowels intact there would be little motive for assuming shortening to have taken place. However, even making the leap that only short vowels could fluctuate in this way, there are still a number of problems with Grønvik's theory.

69. See, for example, the various manifestations of *västgötsk* vowel harmony noted by Kock 1921b:§1466.

70. 1985b:170-72.

71. 1985b:172.

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Firstly, it is highly debatable whether **i* in final syllables would have been preserved after short roots in the language of the Eggja inscription. Although attested forms such as DR 190 Helnæs, ÖG 8 Kälvesten, ÖG 136 Rök **sunu** and VG 119 Sparlösa **makur** testify to the fact that **u* could be retained so late after short syllables, the relevant examples usually quoted for **i* all appear to be instances of original **j* where, contrary to popular belief in the *samprasarana*, it is unlikely that vocalisation to **-i-* ever took place;⁷² the best examples are ÖG 136 Rök **sitir** and Oklunda **sakir**.⁷³ In addition ÖG 136 Rök **tualf** for OI **tólf** may in fact already show syncope from older **twalif*, although it is possible this could rather be due to medial loss from the ordinal as attested in ÖG 136 **tualfta**. Nevertheless the only, albeit tentative, evidence for etymological **-i-* in original final syllables suggests that it was lost as was **-a-*. The traditional assumption that **i* and **u* were not lost after short syllables in the first round of Norse syncope was bolstered by the comparison with the West Germanic dialects. However, since the evidence demonstrates only that **u* may have been preserved, the situation is perhaps more comparable to that seen in Gothic. We might therefore suggest that Eggja shows vowel harmony of <i~e> because the vowels these signs represented had in fact been shortened, but that there was no opposition for the accents to preserve since original short **i* had already been syncopeated everywhere. The fact that the phoneme represented by <u> in KJ 101 **solu** shows no sign of fluctuation could therefore be due to the fact that this vowel had not in fact been shortened, much as **u* had not yet been apocoped after short syllables.

72. See Kock 1904:256-58 and Bibire 1975:§1 (2) as opposed to von Friesen 1906:4-11 and Skomedal 1980:122-24.

73. Peterson 1989:49 and Johnsen 1968 no. 21 both analyse this latter form as equivalent to Old Swedish *sak(e)r*, OI *sekr*. However, whilst it is uncertain whether it is to be derived from **sakir* or **sakjar*, an equally viable alternative is that it may instead reflect ON *sakir* 'feuds' in the phrase in *sa flau sakir* 'but he fled from feuds'. These factors combine to make the use of this evidence to illustrate the fate of **i* in final syllables very insecure.

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Conventionally it is further assumed that whereas apocope took place at different times dependent upon the length of the preceding syllable, shortening took place as one unified process. However, it seems equally possible that, if loss was delayed after short syllables, shortening might have been delayed there as well. In that case, the appearance of vowel harmony in this text would reflect a phenomenon restricted to short vowels, but whereas the new class of short vowels had an unrestricted distribution, long vowels could only appear after short root syllables. It is notable that all the examples of *-e* follow long syllables, whereas the two main exceptions to the posited *<ei>* vowel harmony, *skorin* and according to Grønvik *fōki*, follow short syllables; this might indicate that they were still long and so failed to participate in the fluctuation. In addition, the suggestion that tonic distinctions should have appeared at such an early stage has comparatively little to recommend it. As presented by Grønvik,⁷⁴ the argument in essence runs that all vowels which survived syncope were preserved by a secondary accent on the unaccented syllable, and that it was this secondary accent which gave rise to the delayed peak constituting accent 2. This however means effectively claiming that for a long period during the Viking age only accented and half-accented syllables were present in the language, a nonsensical proposition.⁷⁵

The sequence constructed seems therefore too weak to withstand critical scrutiny, even if it is not wholly refutable at each of its links. Much the same probably applies to most theories which rely on accentual distinctions inherited from those syllables which avoided syncope surviving into the modern dialects. They are taking undue advantage of phenomena recorded at different times and in different places and with different functions

74. And others such as Riad 1988:21-24.

75. This dichotomy could be restated in tonic rather than accentual terms, but I feel the same objection would apply. It does not seem probable that the distinction between the tonemes could be operating both at the time of syncope, and then again in modern Norwegian, having passed through many centuries when no such distinction could have been present.

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merely for convenience, without being able to demonstrate any link between them. Although plausible on the surface, it seems in fact rather dubious to argue that since all inherited disyllables have accent 2 in Norwegian and Swedish, the origins of such tonemes should be extended back to the period when they became the only surviving disyllables, that is urnordisch syncope, since at that point there would be nothing for them to contrast with.

This leaves unanswered the original question as to when long vowels shortened in urnordisch unaccented syllables. It will have to suffice here to say that, apart from the cases of possible abnormally early shortening in certain environments discussed above (§9.4.1), I believe that it is possible that there were long vowels in unaccented syllables for as long as there were urnordisch stem vowels preserved in certain positions. Indeed, given formative suffixes as in Old Icelandic *skollóttir*, *vinátta* or Old Swedish *möþrīne*, it is worth asking whether they ever went away.⁷⁶

9.6. Conclusion

If there is a common trend unifying the development of vowels in unstressed syllables throughout the history of the Nordic, and in fact Germanic, languages, it is that the accented and unaccented vowel systems do not necessarily match up with each other. Rather the unaccented vowel system can have both a divergent distribution and phonetic realisation of its various components, almost always entailing a larger amount of available phonetic space to operate in since there are fewer contrastive units. It is the

76. The argument that these long vowels prove that the syllable is not really unaccented are a lesson in self-servicing, since it is wholly circular to say that a syllable is half-stressed because it contains a long vowel, and that therefore the vowel length is preserved due to the degree of stress. Taking such reasoning to its logical limits, it can be proven that no unaccented syllable can ever contain a long vowel, since the quantity is liable to add some kind of stress. Statements to the effect that 'only short vowels are tolerated in Germanic unaccented syllables' therefore lose some of their sting; in fact they are an exercise in tautology.

9.6. Conclusion

emphasis on this aspect which most sets this study apart from its fellows, at least its more recent fellows. Many of the conclusions have unfortunately had to be left tentative or only half-expressed, in general because I felt there was not sufficient evidence to argue with even faint probability in any given direction. As a result I have tried to couch any new approaches or theories in suitably cautious terms; but at times enticing speculation has visibly taken over.

ABBREVIATIONS

Bibliographical

ANF	<i>Arkiv för nordisk filologi</i>
APhS	<i>Acta Philologica Scandinavica</i>
Bezz. Beit.	<i>(Bezenbergers) Beiträge zur Kunde der indogermanischen Sprachen</i>
CIL	<i>Corpus inscriptionum latinarum</i>
CUP	<i>Cambridge University Press</i>
DGP	<i>Danmarks gamle Personnavne</i>
DR	<i>Danmarks runeindskrifter</i>
Fv.	<i>Fornvännen: tidskrift för svensk antikvarisk forskning</i>
GHÅ	<i>Göteborgs Högskolas Årsskrift</i>
GO	<i>Gotlands runinskrifter</i>
IF	<i>Indogermanische Forschungen</i>
JGPh	<i>Journal of Germanic Philology</i> (continued as ...)
JEGP	<i>Journal of English and Germanic Philology</i>
JIES	<i>Journal of Indo-European Studies</i>
KJ	<i>Die Runeninschriften im älteren Futhark</i> von Wolfgang Krause mit Beiträgen von Herbert Jankuhn
KZ	<i>(Kuhns) Zeitschrift für vergleichende Sprachforschung</i>
Lex.	<i>Lexicon poeticum antiquæ linguæ septentrionalis</i> ved Finnur Jónsson
LUÅ	<i>Lunds Universitets Årsskrift</i>
NID	<i>Norsk-isländska dopnamn ock fingerade namn från medeltiden</i>
NIP	<i>Norsk-isländska personbinamn från medeltiden</i>
NIæR	<i>Norges Indskrifter med de ældre Runer</i>
Niyr	<i>Norges innskifter med de yngre runer</i>
NOWELE	<i>North-Western European Language Evolution</i>

Abbreviations

NTS	<i>Norsk tidsskrift for sprogvidenskap</i> (continued as ...)
NJL	<i>Norwegian Journal of Linguistics</i>
ÖG	<i>Östergötlands runinskrifter</i>
ÖL	<i>Ölands runinskrifter</i>
OUP	<i>Oxford University Press</i>
PBB	<i>(Paul und Braunes) Beiträge zur Geschichte der deutschen Sprache und Literatur</i>
Skj.	<i>Den norsk-islandske skjaldedigtning</i> ved Finnur Jónsson
SM	<i>Smålands runinskrifter</i>
SÖ	<i>Södermanlands runinskrifter</i>
SR	<i>Sveriges runinskrifter</i>
Syll.	<i>Sylloge of Coins of the British Isles</i>
TPhS	<i>Transactions of the Philological Society</i>
U	<i>Upplands runinskrifter</i>
UUA	<i>Uppsala Universitets Årsskrift</i>
VG	<i>Västergötlands runinskrifter</i>
VS	<i>Västmanlands runinskrifter</i>

Manuscript collections

AM	Det arnamagnæanske håndskriftsamling, København & Reykjavík
DN	<i>Diplomatarium Norvegicum</i>
GkS	Den gamle kongelige samling, København & Reykjavík
Holm perg	Kungliga biblioteket, Stockholm

Linguistic

acc.	accusative
dat.	dative

Abbreviations

gen.	genitive
IE	Indo-European
IPA	International Phonetic Alphabet
loc.	locative
ME	Middle English
nom.	nominative
OE	Old English
OI	Old Icelandic
ON	Old Norse
NHG	New High German
OHG	Old High German
OS	Old Saxon
pl.	plural
pres.	present
pret.	preterite
sg.	singular

BIBLIOGRAPHY

To avoid conflicts between the conventions in the various languages, the Scandinavian and German letters such as *ä* etc. have been alphabeticised as though they were English. Therefore diacritics have generally been ignored and *æ*, *ø* are treated as *ae*, *o* respectively.

- Aitzetmüller, R. 1978. *Altbulgarische Grammatik, als Einführung in die slavische Sprachwissenschaft*. (Monumenta linguae slavicae dialecti veteris. Fontes et dissertationes, 12.) Freiburg: Weiher.
- Andersen, H. 1956. 'Lindholmen amulettens indskrift endnu en gang'. *Namn och bygd* 44:182-93.
- Andersen, H. 1961. 'Svarteborg-medaljonens indskrift'. *ANF* 76:51-60.
- Andersen, H. 1970. 'Runeindskriften på Sjællands-brakteaten 2'. *ANF* 85:180-205.
- Antonsen, E.H. 1967. "'Proto-Scandinavian" and common Nordic'. *Scandinavian Studies* 39:16-39.
- Antonsen, E.H. 1968a. Review of Makaev 1965. *Language* 44:132-35.
- Antonsen, E.H. 1968b. Review of Krause~Jankuhn 1966. *Language* 44:627-32.
- Antonsen, E.H. 1969-70. 'Old High German and the laws of final syllables'. *Studies in Linguistics* 21:55-76.
- Antonsen, E.H. 1970. 'Toward a new runic grammar'. *The Nordic Languages and Modern Linguistics*, ed. Hreinn Benediktsson, 313-21. Reykjavík: Vísindafélag Íslendinga.
- Antonsen, E.H. 1972. 'The proto-Germanic syllabics (vowels)'. *Toward a Grammar of Proto-Germanic*, eds. F. van Coetsem and H.L. Kufner, 117-40. Tübingen: Niemeyer.
- Antonsen, E.H. 1975a. 'Om nogle sammensatte personnavne i de ældre runeindskrifter'. *NJL* 29:237-46.

Bibliography

- Antonsen, E.H. 1975b. *A Concise Grammar of the Older Runic Inscriptions*. (Sprachstrukturen, Reihe A. Historische Sprachstrukturen, 3.) Tübingen: Niemeyer.
- Antonsen, E.H. 1978. 'On the notion of "archaizing" inscriptions'. *The Nordic Languages and Modern Linguistics* 3, ed. J.Weinstock, 282-88. Austin: University of Texas.
- Antonsen, E.H. 1986. 'Die ältesten Runeninschriften in heutiger Sicht'. *Germanenprobleme in heutiger Sicht*, ed. H.Beck, 321-43. (Ergänzungsbände zum Reallexikon der germanischen Altertumskunde, 1.) Berlin: de Gruyter.
- Antonsen, E.H. 1987. 'The oldest runic inscriptions in the light of new finds and interpretations'. *Runor och runinskrifter*, 17-28. (Kungl. Vitterhets Historie och Antikvitets Akademien. Konferenser, 15.) Stockholm: Almqvist & Wiksell.
- Árnason, Kristján. 1980. *Quantity in Historical Phonology. Icelandic and Related Cases*. (Cambridge Studies in Linguistics, 30.) Cambridge: CUP.
- Bæksted, A. 1943. *Runerne. Deres historie og brug*. Kjøbenhavn: Nyt nordisk forlag.
- Bæksted, A. 1952. 'Begravede runestene'. *Aarbøger for nordisk oldkyndighed og historie* (1951):63-95.
- Baesecke, G. 1935. 'Die deutschen worte der germanischen gesetze'. *PBB* 59:1-101.
- Bammesberger, A. 1986. *Der Aufbau des germanischen Verbalsystems*. (Untersuchungen zur vergleichenden Grammatik der germanischen Sprachen, 1.) Heidelberg: Winter.
- Bammesberger, A. 1990. *Die Morphologie des urgermanischen Nomens*. (Untersuchungen zur vergleichenden Grammatik der germanischen Sprachen, 2.) Heidelberg: Winter.
- Bandle, O. 1973. *Die Gliederung des Nordgermanischen*. (Beiträge zur nordischen Philologie herausgegeben von der Schweizerischen Gesellschaft für skandinavische Studien, 1.) Basel und Stuttgart:

Bibliography

Helbing & Lichtenhahn.

- Barnes, M.P. 1973. 'On Wolfgang Krause's *Die Sprache der urnordischen Runeninschriften* (1971)'. *Saga-Book of the Viking Society* 18.4:354-74.
- Barnes, M.P. 1984. 'The new runic finds from Illerup and the question of the twenty-second rune'. *Saga och sed* (1984):59-76.
- Barnes, M.P. 1991. 'New runic studies'. *Scandinavica* 30:223-32.
- Benediktsson, Hreinn. 1962. 'The unstressed and the non-syllabic vowels of Old Icelandic'. *ANF* 77:7-31.
- Benediktsson, Hreinn. 1964. 'Old Norse short *e*. One phoneme or two?'. *ANF* 79:63-104.
- Benediktsson, Hreinn. 1968. 'On the inflection of the *n*-stems in Indo-European'. *NTS* 22:7-31.
- Benediktsson, Hreinn. 1972. *The First Grammatical Treatise. Introduction ~ Text ~ Notes ~ Translation ~ Vocabulary ~ Facsimiles*. (University of Iceland Publications in Linguistics, 1.) Reykjavík: Institute of Nordic Linguistics.
- Benediktsson, Hreinn. 1982. 'Nordic umlaut and breaking. Thirty years of research (1951-1980)'. *NJL* 5:1-60.
- Bibire, P. 1975. 'Some notes on the Old Icelandic front mutations'. *ANF* 90:183-212.
- Bjerrum, A. 1973. 'Jens Pedersen Høysgaard's second orthographical specimen'. *Linguistic Papers*, 35-50. Copenhagen: Akademisk forlag.
- Bjorvand, H. 1972. 'Zu den altwestnordischen Pluralendungen -ar, -ir und -r bei femininen Substantiva'. *NJL* 26:195-215.
- Blöndal Magnússon, Ásgeir. 1989. *Íslensk orðsifjabók*. Reykjavík: Orðabók Háskólans.
- Bosworth, J. and T. Northcote Toller. 1898; suppl. 1921. *An Anglo-Saxon dictionary*. Oxford: OUP.
- Boutkan, D. 1992. 'Old English -*ur/-or* in the *r*- and *s*-stems'. *NOWELE* 20:3-26.
- Brate, E. 1886. Review of Burg 1885. *Bezz. Beit.* 11:177-202.
- Brate, E. 1915. 'Möjebro-stenen'. *ANF* 31:227-35.

Bibliography

- Braune, W. 1981. *Gotische Grammatik mit Lesestücken und Wörterverzeichnis*. 19th edn, rev. by Ernst A. Ebbinghaus. (Sammlung kurzer Grammatiken germanischer Dialekte. A. Hauptreihe, 1.) Tübingen: Niemeyer.
- Braune, W. 1987. *Althochdeutsche Grammatik*. 14th edn, rev. by Hans Eggers (Sammlung kurzer Grammatiken germanischer Dialekte. A. Hauptreihe, 5.) Tübingen: Niemeyer.
- Brøndum-Nielsen, J. 1950-73. *Gammeldansk Grammatik i Sproghistorisk Fremstilling*. 8 vols. I and III 2nd edn, II 3rd edn, VIII under Medvirkning af Dr. phil. K.M.Nielsen. København: Schultz; VIII København: Akademisk forlag.
- Brugmann, K. 1897-1911. *Grundriss der vergleichenden Grammatik der indogermanischen Sprachen. Vergleichende Laut-, Stammbildungs- und Flexionslehre*. I *Einleitung und Lautlehre*. II *Lehre von den Wortformen und ihrem Gebrauch*. 2nd edn. Strassburg: Trübner.
- Burg, F. 1885. *Die älteren nordischen runeninschriften. Eine sprachwissenschaftliche untersuchung*. Berlin: Weidmann.
- Burrow, T. 1973. *The Sanskrit language*. 3rd edn. London: Faber & Faber.
- Campbell, A. 1959. *Old English grammar*. Oxford: Clarendon Press.
- Carlsson, N. 1921. *Det gotländska i-omljudet*. (GHÅ, 27:2.).
- Carr, C.T. 1939. *Nominal compounds in Germanic*. (St Andrews University Publications, 41.) London: OUP.
- Chene, B. de, and S.R.Anderson. 1979. 'Compensatory lengthening', *Language* 55:505-35.
- Cleasby, R., and Gudbrand Vigfusson. 1957. *An Icelandic-English dictionary*. 2nd edn, with supplement by Sir W.A. Craigie. Oxford: Clarendon Press.
- Collinge, N.E. 1985. *The laws of Indo-European*. (Amsterdam Studies in the Theory and History of Linguistic Science, Series IV. Current Issues in Linguistic Theory, 35.) Amsterdam: John Benjamins.
- Corpus inscriptionum latinarum*. v *Inscriptiones Galliae cisalpinae latinae*, ed. T.Mommsen. 1872-77. XIII *Inscriptiones trium Galliarum et*

Bibliography

- Germaniarum latinae*, ed. O.Hirschfeld et al. 1899-1943. [CIL]. Berlin: Reimer.
- Cosijn, P.J. 1888. *Altwestsächsische grammatik*. 2 vols. Haag: Nijhoff.
- Cowgill, W. 1959. 'The inflection of the Germanic *ǫ*-presents'. *Language* 35:1-15.
- Cowgill, W. 1975. 'The origins of the Insular Celtic conjunct and absolute verbal endings'. *Flexion und Wortbildung*, ed. H.Rix, 40-70. Wiesbaden: Reichert.
- Dahl, I. 1938. *Substantival inflexion in early Old English. Vocalic stems*. (Lund Studies in English, 7.) Lund: Gleerup.
- Dahlerup, V. 1880. *Ágrip af Noregs konunga sögum*. (Samfund til udgivelse af gammel nordisk litteratur, 2.) København: Møller.
- D'Alquen, R.J.E. 1974. *Gothic ai and au. A possible solution*. (Janua linguarum, series practica, 151.) The Hague: Mouton.
- D'Alquen, R.J.E. 1988. *Germanic accent, grammatical change and the laws of unaccented syllables*. (Canadian Studies in German Language and Literature, 36.) New York: Peter Lang.
- Danmarks gamle Personnavne*. I *Fornavne* udgivet af Gunnar Knudsen og Marius Kristensen under Medvirkning af Rikard Hornby. 1936-48. [DGP]. København: G.E.C. Gad.
- Danmarks runeindskrifter*. I *Text*. II *Atlas* ved L.Jacobsen og E.Moltke. 1941-42. [DR]. København: Munksgaard.
- Dishington, J. 1978. 'Arguments for an *ai/ja*-paradigm in the 3rd weak class of proto-Germanic'. *IF* 83:301-23.
- Düwel, K. 1975. 'Die Runeninschrift auf dem Medaillon von Svarteborg'. *Frühmittelalterliche Studien* 9:144-57 with a note from H.Andersen (1975:157, note 96).
- Düwel, K., and H.Roth. 1977. 'Die Runenfibel von Donzdorf'. *Frühmittelalterliche Studien* 11:409-13.
- Elmevik, L. 1978a. 'Inskriften på Möjbrostenen. Några tankar om läsningen och tydningen'. *Saga och sed* (1978):65-92
- Elmevik, L. 1978b. 'Utvecklingen av urnord. *ai* i icke huvudtonig

Bibliography

- ställning. Ett ljudhistoriskt problem i ny belysning'. *Meijerbergs arkiv för svensk ordforskning* 15:5-85.
- Elmevik, L. 1980. 'Utvecklingen av urg. *au* framför *h* i nordiska språk'. *Studier i nordisk filologi* 62:72-88. (Skrifter utgivna av Svenska litteratursällskapet i Finland, 490.) Helsingfors.
- Elmevik, L. 1987. 'Inskrivna runor—finns de?'. *Runor och runinskrifter*, 91-98. (Kungl. Vitterhets Historie och Antikvitets Akademien. Konferenser, 15.) Stockholm: Almqvist & Wiksell.
- Euler, W. 1985. 'Gab es ein ostgermanisches Sprachgebiet in Südskandinavien? (Zur Frage gotisch-ostgermanischer Runeninschriften in Südschweden und Dänemark)'. *NOWELE* 6:3-22.
- Falk, H. 1886. 'Om apokope og synkope og deres forhold til brydningen'. *ANF* 3:289-308.
- Fell, C.E. 1991. 'Runes and semantics'. *Old English runes and their continental background*, ed. A. Bammesberger, 195-229. (Anglistische Forschungen, 217.) Heidelberg: Winter.
- Finsen, Vilhjálmur. 1852. *Grágás. Islændernes Lovbog i Fristatens Tid*, I. (Nordiske Oldskrifter udgivne af det nordiske Literatur-Samfund, 11 and 17.) Kjøbenhavn.
- Flasdieck, H.M. 1930. 'Zur Geschichte der femininen *ō*-Flexion im Westgermanischen'. *IF* 48:53-66.
- Flasdieck, H.M. 1935. 'Untersuchungen über die germanischen schwachen Verben III. Klasse (unter besonderer Berücksichtigung des Altenglischen)'. *Anglia* 59:1-192.
- Flowers, S.E. 1986. *Runes and magic. Magical formulaic elements in the older runic tradition*. (American University Studies, Series 1. Germanic Languages and Literature, 53.) New York: Peter Lang.
- Förstemann, E. 1900. *Altdeutsches namenbuch. I Personennamen*. 2nd edn. Bonn: Hanstein.
- Friesen, O. von. 1901-06. *Till den nordiska språkhistorien. Bidrag*, I-II. (Skrifter utgifna af K. Humanistiska Vetenskaps-Samfundet i Uppsala, 7:2 and 9:6.)

Bibliography

- Friesen, O. von. 1913. *Upplands runstenar. En allmänfattlig öfversikt*. Uppsala: Akademiska bokhandeln.
- Friesen, O. von. 1916. *Lister- och Listerby-stenarna i Blekinge*. (UUÅ, 1916, program 2.)
- Friesen, O. von. 1920. *Rökstenen. Runstenen vid Röks kyrka, Lysings härad, Östergötland*. Stockholm: Bagge.
- Friesen, O. von. 1924. *Rö-stenen i Bohuslän och runorna i Norden under folkvandringstiden*. (UUÅ, 1924. Filosofi, språkvetenskap och historiska vetenskaper, 4.)
- Friesen, O. von. 1928. *Runorna i Sverige. En kortfattad översikt*. 3rd edn. (Föreningen Urds skrifter, 4.) Uppsala: Lindblad.
- Fritzner, J. 1883-96. *Ordbog over Det gamle norske Sprog*. 2nd edn. Kristiania: Den norske Forlagsforening. *Rettelser og tillegg* ved F.Hødnebo. 1972. Oslo: Universitetsforlaget.
- Goldsmith, J.A. 1990. *Autosegmental and metrical phonology*. Oxford: Blackwell.
- Gotlands runinskrifter*, 1 granskade och tolkade av S.B.F.Jansson och E.Wessén. 1962. [GO]. SR, 11.
- Grønvik, O. 1976. 'Runeinnskriften fra Eikeland på Jæren'. *NJL* 30: 133-90.
- Grønvik, O. 1981. *Runene på Tunesteinen. Alfabet ~ språkform ~ budskap*. Oslo: Universitetsforlaget, plus defence in *doktordisputas* in *Maal og minne* (1984):49-71.
- Grønvik, O. 1982. *The words for 'heir', 'inheritance' and 'funeral feast' in early Germanic*. (Det Norske Videnskaps-Akademi, II. Hist.-filos. klasse avhandlinger. Ny serie, 18.) Oslo: Universitetsforlaget.
- Grønvik, O. 1985a. 'Über den Lautwert der Ing-Runen und die Auslassung von Vokal in den älteren Runeninschriften'. *IF* 90:168-95.
- Grønvik, O. 1985b. *Runene på Eggjasteinen. En hedensk gravinnskrift fra slutten av 600-tallet*. Oslo: Universitetsforlaget.
- Grønvik, O. 1987. *Fra Ågedal til Setre. Sentrale runeinnskrifter fra det 6. århundre*. Oslo: Universitetsforlaget.

Bibliography

- Grønvik, O. 1990a. 'Den nyfunne runeinnskriften fra "Skrålbanken" ved Udby i Sydsjælland. Nytt forsøk på tolkning'. Proceedings of *The Third International Symposium on Runes and Runic Inscriptions at Grindaheim, Valdres, Norway 8-12 August 1990* (forthcoming).
- Grønvik, O. 1990b. 'Der Runenstein von Tanum. Ein religionsgeschichtliches Denkmal aus urnordischer Zeit'. *Old Norse and Finnish Religions and Cultic Placenames*, ed. T.Ahlbäck, 273-93. (Scripta instituti Donneriani Aboensis, 13.) Åbo: Donner Institute for Research in Religious and Cultural History.
- Grønvik, O. 1992. 'Runesteinen fra Malt i Jylland'. *ANF* 107:1-34.
- Gutenbrunner, S. 1951. *Historische Laut- und Formenlehre des Altisländischen, zugleich eine Einführung in das Urnordische*. Heidelberg: Winter.
- Haavaldsen, A. 1991. 'On the datings in Norges Indskrifter med de ældre Runer'. *NOWELE* 18:3-94.
- Hægstad, M. 1907. *Vestnorske maalføre fyre 1350*. I *Nordvestlandsk*. (Skrifter udgivne af Videnskabs-Selskabet i Christiania, II. Hist.-filos. klasse, No. 1.)
- Hagland, J.R. 1978. *Studiar i trøndsk diplomspråk. Ei revurdering av brev-materialet frå tida før 1350*. (Nordisk institutt, Universitetet i Trondheim, Skrifter, 2.) Trondheim: Tapir.
- Hald, K. 1971. *Personnavne i Danmark*. I *Oldtiden*. København: Dansk historisk fællesforening.
- Halsall, M. 1981. *The Old English Rune Poem: A critical edition*. (McMaster Old English Studies and Texts, 2.) Toronto: University of Toronto Press.
- Halvorsen, E.F. 1984. Opposition to Grønvik 1981 in *doktordisputas. Maal og minne* (1984):16-27.
- Halvorsen, E.F. 1989. 'Litt om endelsesvokalene i Eidsivatings kristenrett i OUB 317 4°'. *Festskrift til Finn Hødnebo*, eds. B.Eithun et al., 102-18. Oslo: Novus.
- Hamp, E.P. 1956. 'Gothic ai and au'. *Modern Language Notes* 71:265-69.

Bibliography

- Hänninger, N. 1917. *Fornskånsk ljudutveckling. En undersökning av Cod. AM. 28, 8:o och Cod. Holm. B 76.* (LUÅ N.F. Avd. 1, 13:1.)
- Hauck, K. 1970. *Goldbrakteaten aus Sievern.* (Münstersche Mittelalterschriften, 1.) München: Fink.
- Hellquist, E. 1948. *Svensk etymologisk ordbok*, 3rd edn. Lund: Gleerup.
- Helten, W. van. 1903. 'Grammatisches. LII. Zu der auf schleif- bez. stoss-toniger aussprache der endsilben basierten auslauttheorie. LVII. Zu den altgerm. endungen des gen. und dat. sg. der *i*- und *u*-stämme und verwantes'. *PBB* 28:497-521, 538-42.
- Helten, W. van. 1910. 'Grammatisches. LXXXI. Zur altgerm. flexion der -*ō*-substantive. LXXXIV. Zur altgerm. flexion der -*i*- und -*u*-stämme. LXXXV. Zur altgerm. schw. flexion. LXXXVI. Zur altgerm. declination der -*r*-stämme. LXXXVII. Zur geschichte der -*z*-stämme'. *PBB* 36:452-57, 462-78, 478-90, 490-95, 495-505.
- Hesselman, B. 1913. *Västnordiska studier. II En nordisk och västgermansk slutljudsregel.* (Skrifter utgifna af K. Humanistiska Vetenskaps-Samfundet i Uppsala, 15:2.)
- Heusler, A. 1931. *Altisländisches Elementarbuch.* 3rd edn. Heidelberg: Winter.
- Hildebrand, B.E. 1881. *Anglosachsiska mynt i svenska kongliga mynt-kabinettet funna i Sveriges jord.* 2nd edn. Stockholm: Kongl. Vitterhets Historie och Antiquitets Akademiens Förlag.
- Hines, J. 1984. *The Scandinavian character of Anglian England in the pre-viking period.* (BAR British Series, 124.) Oxford: B.A.R.
- Hødnebo, F. 1984. 'Vokalharmonien i Strengleikar'. *Festskrift til Ludvig Holm-Olsen*, 162-74. Øvre Ervik: Alvheim & Eide.
- Hogg, R.M. 1992. *A Grammar of Old English. I Phonology.* Oxford: Blackwell.
- Holland, G.B. 1980. 'On the origin of the 3rd sg. -*r* in Old Norse'. *American Indian and Indoeuropean Studies. Papers in Honor of Madison S. Beeler*, eds. K.Klar et al., 347-55. (Trends in Linguistics. Studies and Monographs, 16.) The Hague: Mouton.

Bibliography

- Hollifield, P.H. 1980. 'The phonological development of final syllables in Germanic'. *Die Sprache* 26:19-53, 145-178.
- Hollifield, P.H. 1984. 'Raising in unaccented syllables in Germanic'. *Die Sprache* 30:29-72.
- Holthausen, F. 1921. *Altsächsisches Elementarbuch*. 2nd edn. (Germanische Bibliothek I. Sammlung germanischer Elementar- und Handbücher, 1. Reihe. Grammatiken, 5.) Heidelberg: Winter.
- Homiliu-bók (Icelandic Sermons)*. Perg. 4to No. 15 in the Royal Library, Stockholm, with an introduction by F.Paasche. 1935. (Corpus codicum Islandicorum medii aevi, 8.) Copenhagen: Levin & Munksgaard.
- Horowitz, F.E. 1974. *Sievers' law and the evidence of the Rigveda*. (Janua linguarum, series practica, 216.) The Hague: Mouton.
- Høst, G. 1958. 'Innskriften på Gimsøystenen'. *NTS* 18:290-342.
- Høst, G. 1977. Review of Antonsen 1975b. *NJL* 31:151-56.
- Høst Heyerdahl, G. 1981. "'Trylleordet" **alu**'. *Det Norske Videnskaps-Akademi Årbok* (1980):35-49. (Oslo: Universitetsforlaget.)
- Høst, G. 1984. Opposition to Grønvik 1981 in *doktordisputas*. *Maal og minne* (1984):1-15.
- Høst, G. 1987. 'Die Årstad-Inschrift. Eine Neuwertung'. *Runor och run-inskrifter*, 155-61. (Kungl. Vitterhets Historie och Antikvitets Akademien. Konferenser, 15.) Stockholm: Almqvist & Wiksell.
- Ilkjær, J., and J.Lønstrup. 1981. 'Runefundene fra Illerup Ådal. En arkæologisk vurdering af vore ældste indskrifter'. *Kuml* (1981):49-65.
- Ilkjær, J., and J.Lønstrup. 1982. 'Interpretation of the great votive deposits of Iron Age weapons'. *Journal of Danish Archaeology* 1:95-103.
- Ilkjær, J., and J.Lønstrup. 1983. 'Der Moorfund im Tal der Illerup-Å bei Skanderborg in Ostjütland (Dänemark). Vorbericht'. *Germania* 61:95-116.
- Janzén, A. 1947. 'De fornvästnordiska personnamnen'. *Personnamn*, 22-186. (Nordisk Kultur, 7.) Stockholm: Bonnier.
- Jasanoff, J.H. 1978. *Stative and Middle in Indo-European*. (Innsbrucker Beiträge zur Sprachwissenschaft, 23.) Innsbruck: Institut für Sprach-

Bibliography

- wissenschaft der Universität Innsbruck.
- Jasanoff, J.H. 1983. 'A rule of final syllables [in Slavic]', and 'Reply to Schmalsteig and Kortlandt'. *JIES* 11:139-49, 187-90.
- Jellinek, M.H. 1891. *Beiträge zur erklärang der germanischen flexion*. Berlin: Speyer & Peters.
- Jóhannesson, Alexander. 1923. *Grammatik der urnordischen Runeninschriften*. (Germanische Bibliothek I. Sammlung germanischer Elementar- und Handbücher, 1. Reihe. Grammatiken, 11.) Heidelberg: Winter.
- Jóhannesson, Alexander. 1927. *Die Suffixe im Isländischen*. (Suppl. to *Árbók Háskóla Íslands*.) Reykjavík: Gutenberg.
- Johnsen, I.S. 1958. 'Til Tu-stenen'. *NTS* 18:343-47.
- Johnsen, I.S. 1968. *Stuttruner i vikingtidens innskrifter*. Oslo: Universitetsforlaget.
- Jones, O.F. 1958. 'Gothic *au* in inflectional syllables'. *Language* 34:33-39.
- Jónsson, Finnur. 1901. *Det norsk-islandske skjaldesprog omtr. 800-1300*. (Samfund til udgivelse af gammel nordisk litteratur, 28.) København: Møller.
- Jónsson, Finnur. 1912-15. *Den norsk-islandske skjaldedigtning. A. Tekst efter håndskrifterne*. 2 vols, udgiven af Kommissionen for det Arnamagnæanske Legat. [Skj.] København: Gyldendal; Kristiania: Nordisk Forlag.
- Jónsson, Finnur. 1931. *Lexicon poeticum antiquæ linguæ septentrionalis. Ordbog over det norsk-islandske skjaldesprog, oprindeligt forfattet af Sveinbjörn Egilsson*. 2nd edn. [Lex.] København: Møller.
- Juntune, T.W. 1973. 'The informational value of Germanic loanwords into Finnish'. *Amsterdamer Beiträge zur älteren Germanistik* 4:1-48.
- Kaufmann, H. 1968. *Ergänzungsband* to Förstemann 1900. München: Fink; Hildesheim: Olms.
- Kern, J.H. 1906. 'Zum nom. und acc. plur. der *ā*-stämme im ags.'. *PBB* 31:272-6.
- Kiparsky, V. 1934. *Die gemeinslavischen Lehnwörter aus dem*

Bibliography

- Germanischen*. (Annales Academiæ Scientiarum Fennicæ. Ser. B, 32.)
Helsinki: Suomalainen Tiedekatemia.
- Klein, T. 1977. *Studien zur Wechselbeziehung zwischen altsächsischem und althochdeutschem Schreibwesen und ihrer Sprach- und kultur-geschichtlichen Bedeutung*. (Göppinger Arbeiten zur Germanistik, 205.)
Göppingen: Kümmerle.
- Klingenberg, H. 1973. *Runenschrift — Schriftedenken — Runeninschriften*.
Heidelberg: Winter.
- Kluge, F. 1886. *Nominale stammbildungslehre der altgermanischen dialecte*. Halle: Niemeyer.
- Knirk, J.E. 1980-81. 'Runeinnskripta på Eikelandsspenna. Eit par lesingar'.
Frá haug og heiðni 8:211-15.
- Knirk, J.E. 1984. Opposition to Grønvik 1981 in *doktordisputas*. *Maal og minne* (1984):28-37.
- Knudsen, T. 1967. 'Om det eldste bevarte sørøstnorske skriftspråk'. *Skrift-tradisjon og litteraturmål. Artikler og avhandlinger i urvalg*, 9-52.
Oslo: Universitetsforlaget.
- Köbler, G. 1989. *Gotisches Wörterbuch*. Leiden: Brill.
- Kock, A. 1891. 'Zur laut- und formenlehre der altnordischen sprachen. I. 3. plur. conj. und n. a. plur. der neutralen *n*-stämme. III. Die genetivendung *-u(r)* der st. fem.'. *PBB* 15:244-48, 254-58.
- Kock, A. 1898a. 'Der *a*-umlaut und der wechsel der endvocale *a* : *i* (*e*) in den altnordischen sprachen'. *PBB* 23:484-554.
- Kock, A. 1898b. 'Studier i de nordiska språkens historie. II. Bidrag till fornordisk formlära, 2. Tredje pers. sg. pres. ind. i fornord. språk'.
ANF 14:230-32.
- Kock, A. 1904. 'Ytterligere om ljudförbindelsen *aiw*'. *ANF* 20:255-83.
- Kock, A. 1916. *Umlaut und Brechung im Altschwedischen. Eine Übersicht*.
(LUÅ N.F. Avd. 1, 12:1.)
- Kock, A. 1918. *Altnordischer u-Umlaut in Ableitungs- und Beugungs- endungen*. (LUÅ N.F. Avd. 1, 14:28.)
- Kock, A. 1921a. 'Till tolkningen av urnordiska runinskrifter. I. Till

Bibliography

- Stentofte-inskriptionen. II. Till Björketorps-inskriptionen'. *ANF* 37:1-26.
- Kock, A. 1921b. *Svensk ljudhistoria*, IV. Lund: Gleerup; Leipzig: Harrassowitz.
- Kolsrud, S. 1917. 'Um *e* og *æ* i cod. Holm. isl. membr. no. 34 in 4to'. *ANF* 33:283-92.
- Kortlandt, F. 1978. 'On the history of the genitive plural in Slavic, Baltic, Germanic, and Indo-European'. *Lingua* 45:281-300.
- Kortlandt, F. 1981. '1st sg. middle **-H₂*'. *IF* 86:123-36.
- Kortlandt, F. 1983. 'On final syllables in Slavic'. *JIES* 11:167-85.
- Kortlandt, F. 1986a. 'Proto-Indo-European tones?'. *JIES* 14:153-60.
- Kortlandt, F. 1986b. 'The Germanic first class of weak verbs'. *NOWELE* 8:27-31.
- Kortlandt, F. 1990. 'The Germanic third class of weak verbs'. *NOWELE* 15:3-10.
- Krahe, H. 1967. *Germanische Sprachwissenschaft. II Formenlehre*. 6th edn. (Sammlung Götschen, 780.) Berlin: de Gruyter.
- Kraus, F.X. 1890. *Die christlichen Inschriften der Rheinlande. I Die altchristlichen Inschriften*. Freiburg: Mohr (Siebeck).
- Krause, W. 1953. *Handbuch des Gotischen*. München: Beck.
- Krause, W. 1968. Review of Makaev 1965. *Göttingische gelehrte Anzeigen* 220:109-32.
- Krause, W. 1969. 'Zur Herkunft von finn. *runo* "Lied"'. *Finnisch-Ugrische Forschungen* 37:91-97.
- Krause, W. 1971. *Die Sprache der urnordischen Runeninschriften*. Heidelberg: Winter.
- Krause, W., mit Beiträgen von H.Jankuhn. 1966. *Die Runeninschriften im älteren Futhark. I Text. II Tafeln*. [KJ]. (Abhandlungen der Akademie der Wissenschaften in Göttingen, philologisch-historische Klasse, Dritte Folge, 65.) Göttingen: Vandenhoeck & Ruprecht.
- Kufner, H.L. 1972. 'The grouping and separation of the Germanic languages'. *Toward a Grammar of Proto-Germanic*, eds. F. van Coetsem and H.L. Kufner, 71-97. Tübingen: Niemeyer.

Bibliography

- Kuryłowicz, J. 1964. *The inflectional categories of Indo-European*. Heidelberg: Winter.
- Kuryłowicz, J. 1968. *Indogermanische Grammatik*. II Akzent ~ Ablaut. Heidelberg: Winter.
- Läffler, L.F. 1892. 'Bidrag till tolkningen av Tune-stenens runinskrift'. *Uppsalastudier tillägnade Sophus Bugge*, 1-5. Uppsala: Almqvist & Wiksell.
- Lagman, S. 1988. 'Till försvar för runristarnas ortografi'. *Studier i svensk språkhistoria*, ed. G.Pettersson, 165-77. (Lundastudier i nordisk språkvetenskap, A 41.) Lund: Lund University Press.
- Lagman, S. 1990. *De stungna runorna. Användning och ljudvärden i runsvenska steninskrifter*. (Runrön, 4.) Uppsala: Institutionen för nordiska språk, Uppsala universitet.
- Lane, G.S. 1963. 'Bimoric and trimoric vowels and diphthongs. Laws of Germanic finals again'. *JEGP* 62:155-70.
- Larsson, L. 1885. *Isländska handskriften No. 645 4° i den Arnarnænska samlingen på universitetsbiblioteket i København*. I *Handskriftens äldre del*. Lund: Gleerup.
- Larsson, L. 1891. *Ordförrådet i de äldsta isländska handskrifterna*. Lund: Lindstedt.
- Lass, R. 1984. *Phonology. An introduction to basic concepts*. Cambridge: CUP.
- Lehmann, W.P. 1961. 'A definition of proto-Germanic. A study in the chronological delimitation of languages'. *Language* 37:67-74.
- Lehmann, W.P. 1986. *A Gothic Etymological Dictionary, based on the third edition of Vergleichendes Wörterbuch der Gotischen Sprache by Sigmund Feist*. Leiden: Brill.
- Liberman, A. 1982. *Germanic Accentology*. I *The Scandinavian Languages*. (Minnesota Publications in the Humanities, 1.) Minneapolis: University of Minnesota Press.
- Lid, N. 1952. 'Den nordiske nominativ singularis av maskuline *anstammer*'. *NTS* 16:237-40.

Bibliography

- Liestøl, A. 1981. 'The Viking runes. The transition from the older to the younger *fupark*'. *Saga-Book of the Viking Society* 20.4:247-66.
- Lindblad, G. 1954. *Studier i Codex Regius av Äldre Eddan*. (Lundastudier i nordisk språkvetenskap, 10.) Lund: Gleerup.
- Lindeman, F.O. 1967. 'Notes sur quelques formes verbales du germanique'. *NTS* 21:137-43.
- Lindeman, F.O. 1982. 'Varia. I. Le Gén. Sg. des thèmes féminins en -ā-en vieil-irlandais'. *Études celtiques* 19:159-60.
- Lindquist, I. 1923. *Galdrar. De gamla germanska trollsångernas stil undersökt i samband med en svensk runinskrift från folkvandringstiden*. (GHÅ, 29:1.)
- Lindquist, I. 1924. 'Namnet Ludvig på urnordiska. Bidrag till en samnordisk dissimilationsteori'. *Festskrift tillägnad Hugo Pipping*, 334-55. (Skrifter utgivna av Svenska litteratursällskapet i Finland, 175.) Helsingfors.
- Lloyd, A.L. 1961. 'Indo-European unstressed short *e* in Germanic'. *Modern Language Notes* 76:847-51.
- Lubotsky, A.M. 1988. *The System of Nominal Accentuation in Sanskrit and Proto-Indo-European*. (Memoirs of the Kern Institute, 4.) Leiden: Brill.
- Lühr, R. 1984. 'Reste der athematischen Konjugation in den germanischen Sprachen'. *Das Germanische und die Rekonstruktion der indogermanischen Grundsprache*, eds. J.Untermann and B.Brogyanyi, 25-90. (Amsterdam Studies in the Theory and History of Linguistic Science, Series IV. Current Issues in Linguistic Theory, 22.) Amsterdam: John Benjamins.
- Maaløe, C. 1961. 'The runic bracteate from Skodborg'. *APhS* 24:13-17.
- Mackeprang, M.B. 1952. *De nordiske Guldbrakteater*. (Jysk Arkæologisk Selskabs Skrifter, 2.) Århus: Universitetsforlaget i Aarhus.
- Makaev, E.A. 1965. *Iazyk drevneishikh runicheskikh nadpisei. Lingvisticheskii i istorikofilologicheskii analiz*. Moskva: Izdatelstvo "Nauka".
- Marchand, J.W. 1973. *The Sounds and Phonemes of Wulfila's Gothic*.

Bibliography

- (*Janua linguarum, series practica*, 25.) The Hague: Mouton.
- Markey, T.L. 1972. 'Gothic imperatives in -au'. *Studia Linguistica* 26:42-47.
- Marstrander, C.J.S. 1915. *Bidrag til det norske sprogs historie i Irland*. (Videnskaps-Selskapets skrifter, II. Hist.-filos. klasse (1915): No. 5.)
- Marstrander, C.J.S. 1929. 'De gotiske runeminnesmerker'. *NTS* 3:25-157.
- Marstrander, C.J.S. 1930a. 'Ein neues Perfektopräsens'. *NTS* 4:245-50.
- Marstrander, C.J.S. 1930b. 'Tunestenen'. *NTS* 4:294-358.
- Marstrander, C.J.S. 1945. 'Vettelandsstenen'. *Stavanger Museum Årshæfte* 55:13-42.
- Marstrander, C.J.S. 1952. 'De nordiske runeinnskrifter i eldre alfabet. Skrift og språk i folkevandringstiden'. *Viking* 16:1-277.
- Marstrander, C.J.S. 1953. *Rosselandsssteinen*. (Universitetet i Bergen Årbok (1951). Historisk-antikvarisk rekke, Nr. 3.)
- Marstrander, C.J.S. 1965. 'Runica'. *NTS* 20:249-86.
- Mayrhofer, M. 1956-80. *Kurzgefaßtes etymologisches Wörterbuch des Altindischen*. 4 vols. Heidelberg: Winter.
- Mayrhofer, M. 1986. *Indogermanische Grammatik*. I.2 *Lautlehre [Segmentale Phonologie des Indogermanischen]*. Heidelberg: Winter.
- Meid, W. 1956-58. 'Zur Dehnung praesuffixaler Vokale in sekundären Nominalableitungen'. *IF* 62:260-95, 63:1-28.
- Meid, W. 1967. *Germanische Sprachwissenschaft*. III *Wortbildungslehre*. (Sammlung Götschen, 1218.) Berlin: de Gruyter.
- Meli, M. 1989. 'Considerazioni sugli appellativi femminili nelle iscrizioni runiche più antiche'. *Quaderni di lingue e letteratura* 14:137-47.
- Mensel, E.H. 1902. 'Zu den langen flexions- und ableitungssilben im alt-hochdeutschen'. *JGPh* 4:25-46.
- Moltke, E. 1956-58. *Jon Skonvig og de andre runetegnere. Et bidrag til runologiens historie i Danmark og Norge*. (Bibliotheca Arnemagnæana Supplementum, I-II.) København: Munksgaard.
- Moltke, E. 1985. *Runes and their Origin. Denmark and Elsewhere*. Transl. Peter Foote. Copenhagen: Nationalmuseets Forlag.

Bibliography

- Moltke, E., and M.Stoklund. 1981. 'Runeindskrifterne fra Illerup mose'. *Kuml* (1981):67-79.
- Morris, R.L. 1985. 'Northwest-Germanic *rūn*- "rune". A case of homonymy with Go. *rūna* "mystery"'. *PBB* 107:344-58.
- Moulton, W.G. 1954. 'The stops and spirants of early Germanic'. *Language* 30:1-42.
- Musset, L. 1965. *Introduction à la runologie, en partie d'après les notes de Fernand Mossé*. (Bibliothèque de philologie germanique, 20.) Paris: Aubier-Montaigne.
- Neckel, G. 1929. 'Zur Etymologie von slav. *dělo*, *dělati*'. *Zeitschrift für slavische Philologie* 6:67-69.
- Nielsen, C.J. 1990. 'Om Starup-stenen, Ribe-kraniestykket og dannelsen af den korte runerække'. *Danske studier* (1990):145-50.
- Nielsen, H.F. 1981. *Old English and the Continental Germanic Languages. A Survey of Morphological and Phonological Interrelations*. (Innsbrucker Beiträge zur Sprachwissenschaft, 33.) Innsbruck: Institut für Sprachwissenschaft der Universität Innsbruck.
- Nielsen, H.F. 1989. *The Germanic Languages. Origins and Early Dialectal Interrelations*. Tuscaloosa: University of Alabama Press.
- Nielsen, K.M. 1960. 'Til runedanskens ortografi'. *ANF* 75:1-78.
- Nielsen, K.M. 1970. 'Om dateringen af de senurnordiske runeindskrifter, synkopen og 16 tegns futharken'. *Aarbøger for nordisk oldkyndighed og historie* (1969):5-51.
- Nielsen, K.M. 1975. 'The position of proto-Scandinavian in the Germanic language group'. *APhS* 30:1-16.
- Nielsen, N.Å. 1968. *Runestudier*. (Odense University Studies in Scandinavian Languages, 1.) Odense: Odense University Press.
- Nielsen, N.Å. 1984. *Fra runesprog til nudansk. Studier og kommenterede tekster*. Århus: Nordisk institut, Aarhus Universitet.
- Niquet, F. 'Fundchronik Land Niedersachsen und Land Bremen. Grab mit Runenfibel von Beuchte, Kr. Goslar'. *Germania* 36:216-17.
- Noreen, A. 1904. *Altnordische grammatik*. II *Altschwedische grammatik*,

Bibliography

- mit einschluss des altgutnischen.* (Sammlung kurzer grammatiken germanischer dialekte. A. Hauptreihe, 8.) Halle: Niemeyer.
- Noreen, A. 1923. *Altnordische Grammatik. I Altisländische und altnorwegische Grammatik (Laut- und Flexionslehre), unter Berücksichtigung des Urnordischen.* 4th edn. (Sammlung kurzer Grammatiken germanischer Dialekte. A. Hauptreihe, 4.) Tübingen: Niemeyer.
- Noreen, E. 1945. 'Några urnordiska inskrifter'. *ANF* 60:145-50.
- Norges Indskrifter med de ældre Runer. Indledning and 3 vols* ved S.Bugge og M.Olsen. 1891-1924. [NIæR]. Christiania: Det Norske Historiske Kildeskriftfond.
- Norges innskrifter med de yngre runer, I-* ved M.Olsen, A.Liestøl et al. 1941-. [NiyR]. Oslo: Kjeldeskriftfondet.
- Norsk-isländska dopnamn ock fingerade namn från medeltiden* samlade och utgivna av E.H.Lind. 1905-15. [NID]. Uppsala: Lundequist; Leipzig: Harrassowitz.
- Norsk-isländska personbinamn från medeltiden* samlade och utgivna med förklaringar av E.H.Lind. 1920-21. [NIP]. Uppsala: Lundequist.
- Odenstedt, B. 1985. 'Om typologi och grafisk variation i den äldre futharken. Några reflexioner kring Kai-Erik Westergaards avhandling Skriftegn og symboler. Noen studier over tegnformer i det eldre runealfabet'. *ANF* 100:1-15.
- Odenstedt, B. 1990. *On the Origin and Early History of the Runic Script. Typology and Graphic Variation in the Older Futhark.* (Acta Academiae Regiae Gustavi Adolphi, 59.) Uppsala.
- Ölands runinskrifter* granskade och tolkade av S.Söderberg och E.Bräte. 1900-06. [ÖL]. *SR*, 1.
- Olsen, M. 1954. 'Runic inscriptions in Great Britain, Ireland and the Isle of Man'. *Viking Antiquities in Great Britain and Ireland. VI Civilisation of the Viking Settlers in Relation to their Old and New Countries*, ed. H.Shetelig, 151-233. Oslo: Aschehoug.
- Östergötlands runinskrifter* granskade och tolkade av E.Bräte. 1911. [ÖG]. *SR*, 2.

Bibliography

- Page, R.I. 1958. 'Northumbrian *æfter* (=in memory of) + accusative'. *Studia Neophilologica* 30:145-52.
- Page, R.I. 1970. Review of N.Å.Nielsen 1968. *Mediaeval Scandinavia* 3:202-04.
- Page, R.I. 1973. *An Introduction to English Runes*. London: Methuen.
- Palm, R. 1988. 'Mönsterbunden variation i vikingatidens runinskrifter'. *Studier i svensk språkhistoria*, ed. G.Pettersson, 214-27. (Lundastudier i nordisk språkvetenskap, A 41.) Lund: Lund University Press.
- Palmér, J. 1930-31. 'Betydelseutvecklingen i isl. *heiðr*'. *APhS* 5:289-304.
- Penzl, H. 1989. 'Die Gallehusinschrift. Trümmer der nordisch-west-germanischen Ursprache'. *Germanische Rest- und Trümmersprachen*, ed. H.Beck, 87-96. (Ergänzungsbände zum Reallexikon der germanischen Altertumskunde, 3.) Berlin: de Gruyter.
- Peterson, L. 1981. *Kvinnonamnens böjning i fornsvenskan. De ursprungligen starkt böjda namnen*. (Anthroponymica Suecana, 8.) Uppsala: Almqvist & Wiksell.
- Peterson, L. 1989. *Svenskt runordsregister*. (Runrön, 2.) Uppsala: Institutionen för nordiska språk, Uppsala universitet.
- Pettersen, E. 1989. 'Vokalharmoni i gammelt indre sørvestlandsk?'. *Festskrift til Finn Hødnebo*, ed. B.Eithun et al., 250-60. Oslo: Novus.
- Pieper, P. 1987. 'Spiegelrunen'. *Runor och runinskrifter*, 67-72. (Kungl. Vitterhets Historie och Antikvitets Akademien. Konferenser, 15.) Stockholm: Almqvist & Wiksell.
- Pieper, P. 1991. 'The bones with runic inscriptions from the lower Weser river. New results of scientific investigations concerning the problem: original(s) or fake(s)'. *Old English Runes and their Continental Background*, ed. A.Bammesberger, 343-58. (Anglistische Forschungen, 217.) Heidelberg: Winter.
- Pipping, H. 1901. *Gotländska studier*. Uppsala: Akademiska Bokhandeln.
- Pipping, H. 1905-07. *Guta lag och Guta saga. Jämtne ordbok*. (Samfund til udgivelse af gammel nordisk litteratur, 33.) København: Møller.
- Pipping, H. 1912. 'Fornsvenskt lagspråk. II. Spår av ofullständig vokal-

Bibliography

- balans i Äldre Västgötalagen. III. Spår av ofullständig vokalbalans i Yngre Västgötalagens kyrkobalk'. *Studier i nordisk filologi* 3:10. (Skrifter utgivna av Svenska litteratursällskapet i Finland, 103.) Helsingfors.
- Pokorny, J. 1959. *Indogermanisches etymologisches Wörterbuch*, I. Bern: Francke.
- Prokosch, E. 1939. *A Comparative Germanic Grammar*. Baltimore: Linguistic Society of America.
- Quak, A. 1978. 'ybir risti runar. Zur Sprache eines uppländischen Runenmeisters'. *Amsterdamer Beiträge zur älteren Germanistik* 13:35-67.
- Ralph, B. 1975. *Phonological Differentiation. Studies in Nordic Language History*. (Nordistica Gothoburgensia, 8.) Göteborg: Acta Universitatis Gothoburgensis.
- Riad, T. 1988. 'Tracing the foot. A metrical analysis of change in Nordic languages'. *ANF* 103:1-35.
- Rindal, M. 1987. *Ortografi, fonologi og morfologi i Sth. perg. fol. nr. 6 (Barlaams ok Josaphats saga)*. (Universitetet i Bergen, Nordisk institutts skriftserie, 13.) Oslo: Novus.
- Ritter, R.-P. 1977. 'Zur Frage der finnischen Evidenz für die Sievers'sche Regel im Germanischen'. *Die Sprache* 23:171-79.
- Rix, H. 1992. *Historische Grammatik des Griechischen. Laut- und Formenlehre*. 2nd edn. Darmstadt: Wissenschaftliche Buchgesellschaft.
- Rögnvaldsson, Eiríkur. 1981. 'U-hljóðvarp og önnur a~ö víxl í nútíma-íslensku'. *Íslenskt mál og almenn málfræði* 3:25-58.
- Rygh, O. 1900. *Norske Gaardnavne*. III *Hedemarkens Amt*. Kristiania: Fabritius & Sønner.
- Salberger, E. 1961. 'An ideographic rune on the Skodborg bracteate'. *APhS* 24:18-32.
- Salberger, E. 1978. *Runsvenska namnstudier*. (Acta Universitatis Stockholmiensis. Stockholm Studies in Scandinavian Philology, New series, 13.) Stockholm: Almqvist & Wiksell.
- Salberger, E. 1987. 'Två mansnamn i urnordiskan'. *Namn och bygd*

Bibliography

75:5-22.

- Santesson, L. 1989. 'En blekingsk blotinskrift. En nytolkning av inledningsraderna på Stentofstenen'. *Fornvännen* 84:221-29.
- Sapir, E. 1921. *Language. An Introduction to the Study of Speech*. New York: Harcourt, Brace & World.
- Schetelig, H. 1914. 'Arkeologiske Tidsbestemmelser av ældre norske Runeindskrifter'. *NlæR*, III, 1-76.
- Schmalstieg, W.R. 1980. *Indo-European Linguistics. A New Synthesis*. University Park and London: Pennsylvania State University Press.
- Schmalstieg, W.R. 1983. 'Slavic *kamy* and *mati*. A structural view'. *JIES* 11:151-65
- Schönfeld, M. 1911. *Wörterbuch der altgermanischen Personen- und Völkernamen nach der Überlieferung des klassischen Altertums bearbeitet*. (Germanische Bibliothek. I. Sammlung germanischer Elementar- und Handbücher, 4. Reihe. Wörterbücher, 2.) Heidelberg: Winter.
- Schramm, G. 1957. *Namenschatz und Dichtersprache. Studien zu den zweigliedrigen Personennamen der Germanen*. Ergänzungshefte zur KZ, 15. Göttingen: Vandenhoeck & Ruprecht.
- Schwarz, E. 1956. *Germanische Stammeskunde*. Heidelberg: Winter.
- Searle, W.G. 1897. *Onomasticon Anglo-Saxonicum*. Cambridge: CUP.
- Seebold, E. 1967. 'Die ae. starken Partizipia Praeteriti mit Umlaut'. *Anglia* 85:251-69.
- Seebold, E. 1968. 'Erhaltung und Schwund des Kompositionsvokals im Gotischen'. *KZ* 82:69-97.
- Seebold, E. 1972. *Das System der indogermanischen Halbvokale*. Heidelberg: Winter.
- Seip, D.A. 1929. 'Til Tune-innskriften'. *NTS* 3:21-24.
- Seip, D.A. 1931. *Norsk språkhistorie til omkring 1370*. Oslo: Aschehoug.
- Sihler, A. 1977. Review of Horowitz 1974. *General Linguistics* 17:23-33.
- Sjöros, B. 1904. 'De nasalerade vokalerna och deras beteckning i de danska runinskrifterna'. *ANF* 20:211-27.

Bibliography

- Sjöros, B. 1905. 'Genmäle'. *ANF* 21:177-86.
- Skomedal, T. 1980. 'Synkope, omlyd og bryting i nordisk'. *The Nordic Languages and Modern Linguistics* 4, ed. E.Hovdhaugen, 120-39. (Oslo: Universitetsforlaget.
- Skovgaard-Petersen, I. 1977. 'Oldtid og vikingetid'. *Danmarks historie. I Tiden indtil 1340*, by I.Skovgaard-Petersen, A.E. Christensen and H.Paludan, 15-209. København: Gyldendal.
- Smålands runinskrifter* granskade och tolkade av R.Kinander. 1935-61. [SM]. *SR*, 4.
- Södermanlands runinskrifter* granskade och tolkade av E.Bräte och E.Wessén. 1924-36. [SÖ]. *SR*, 3.
- Söderwall, K.F. 1884-1918; suppl. 1925-73. *Ordbok öfver Svenska Medeltids-språket*. 2 vols plus *Supplement* by K.F. Söderwall et al. (Samlingar utgifna af Svenska Fornskrift-Sällskapet, 27 and 54.) Lund.
- Sommerstein, A.H. 1977. *Modern Phonology*. (Theoretical Linguistics, 2.) London: Arnold.
- Stang, C.S. 1966. *Vergleichende Grammatik der baltischen Sprachen*. Oslo: Universitetsforlaget.
- Steblin-Kamenskij, M.I. 1959. 'Concerning the three periods in the Scandinavian *i*-umlaut'. *ANF* 74:105-11.
- Steblin-Kamenskij, M.I. 1963. 'The Scandinavian rhotacism and laws governing the change of distinctive features'. *Philologica Pragensia* 6:362-67.
- Stephens, G. 1866-1901. *The Old-Northern Runic Monuments of Scandinavia and England*. 4 vols. London: Smith, etc.; Köbenhavn: Michaelsen and Tillge etc.
- Stiles, P.V. 1984. 'On the interpretation of Older Runic *swestar* on the Opedal stone'. *NOWELE* 3:3-48.
- Stiles, P.V. 1988a. 'Gothic nominative singular *brōþar* "brother" and the reflexes of Indo-European long vowels in the final syllables of Germanic polysyllables'. *TPhS* 86:115-43.
- Stiles, P.V. 1988b. 'Questions of phonologization and relative chronology,

Bibliography

- with illustrations from Old English'. *Luick Revisited*, ed. D.Kastovsky et al., 335-54. (Tübinger Beiträge zur Linguistik, 288.) Tübingen: Narr.
- Stoklund, M. 1987. 'New inscriptions from Illerup and Vimose'. *Runor och runinskrifter*, 281-300. (Kungl. Vitterhets Historie och Antikvitets Akademien. Konferenser, 15.) Stockholm: Almqvist & Wiksell.
- Stocklund, M. 1991. 'Die Runeninschrift auf der Rosettenfibel von Udby. Eine neue Diskussionsgrundlage'. *Festskrift til Ottar Grønvik*, ed. J.O. Askedal et al., 88-101. Oslo: Universitetsforlaget.
- Streitberg, W. 1896. *Urgermanische Grammatik. Einführung in das vergleichende Studium der altgermanischen Dialekte*. (Sammlung von Elementarbüchern der altgermanischen Dialekte, 1.) Heidelberg: Winter.
- Sveriges runinskrifter*, 1-. 1900-. [SR]. Stockholm: Kungl. Vitterhets Historie och Antikvitets Akademien.
- Sylloge of Coins of the British Isles. Cumulative Indices*, XXVIII and XLI by V.Smart. 1981, 1992. [Syll.]. London: British Academy.
- Szemerényi, O. 1960. *Studies in the Indo-European System of Numerals*. Heidelberg: Winter.
- Szemerényi, O. 1990. *Einführung in die vergleichende Sprachwissenschaft*. 4th edn. Darmstadt: Wissenschaftliche Buchgesellschaft.
- Tamm, F. 1877. *Om fornnordiska feminina afleda på ti och på ipa*. Upsala: Edquist.
- Tamm, F. 1899. *Om avledningsändelser hos svenska adjektiv, deras historia ock nutida förekomst*. Skrifter utgifna af K. Humanistiska Vetenskaps-Samfundet i Uppsala, 6:8.
- Taylor, M. 1990. 'The etymology of the tribal name *Eruli*'. *General Linguistics* 30:108-25.
- Thompson, C.W. 1975. *Studies in Upplandic Runography*. Austin: University of Texas Press.
- Thurneysen, R. 1946. *A Grammar of Old Irish*, revised and enlarged edition with supplement, transl. D.A.Binchy and O.Bergin. Dublin: Dublin Institute for Advanced Studies, 1946.

Bibliography

- Tops, G.A.J. 1974. *The Origin of the Germanic Dental Preterit. A Critical Research History since 1912*. Leiden: Brill.
- Torp, A. 1909. 'Gamalnorsk ordavleiding'. *Gamalnorsk ordbok med nynorsk tyding*, ved M.Hægstad og A.Torp, xxviii-lxxi. Kristiania: Det norske samlaget.
- Upplands runinskrifter*, I-IV granskade och tolkade av E.Wessén och S.B.F. Jansson. 1940-58. [U]. SR, 6-9.
- Västergötlands runinskrifter* granskade och tolkade av H.Jungner och E. Svärdström. 1940-70. [VG]. SR, 5.
- Västmanlands runinskrifter* granskade och tolkade av S.B.F.Jansson. [VS]. 1964. SR, 13.
- Venås, K. 1971. *Adjektivsuffixet germansk -ga- i norrønt, med eit tillegg om utviklinga i nyare mål*. Oslo: Universitetsforlaget.
- Vondrák, W. 1924. *Vergleichende slavische Grammatik. I Lautlehre und Stammbildungslehre*. 2nd edn. Göttingen: Vandenhoeck & Ruprecht.
- Vries, J. de. 1962. *Altnordisches etymologisches Wörterbuch*. 2nd edn. Leiden: Brill.
- Walde, A. 1900. *Die germanischen Auslautgesetze. Eine sprachwissenschaftliche Untersuchung mit vornehmlicher Berücksichtigung der Zeitfolge der Auslautsveränderungen*. Halle: Niemeyer.
- Watkins, C. 1969. *Indogermanische Grammatik. III.1 Formenlehre. Geschichte der indogermanischen Verbalflexion*. Heidelberg: Winter.
- Wells, W.C. 1934-44. 'The Stamford and Peterborough mints'. *British Numismatic Journal* 22:35-77, 23:7-28, 24:69-109.
- Wessén, E. 1914. *Zur Geschichte der germanischen n-Deklination*. Uppsala: Akademische Buchdruckerei.
- Wessén, E. 1915. 'Om de starka verbens präteritiparticip i de germanska språken'. *Språkvetenskapliga sällskapet i Uppsala förhandlingar* (1913-15), 56-97. (UUA, 1915.)
- Wessén, E. 1927. 'Till de feminina substantivböjningarnas historia'. *Festskrift til Hjalmar Falk*, 78-111. Oslo: Aschehoug.
- Wessén, E. 1965. *Svensk språkhistoria. II Ordbildningslära*. 4th edn.

Bibliography

- Stockholm: Almqvist & Wiksell.
- Westergaard, K.-E. 1981. *Skrifttegn og symboler. Noen studier over tegnformer i det eldre runealfabet*. (Osloer Beiträge zur Germanistik, 6.) Oslo: Veröffentlichungen des Germanistischen Instituts der Universität Oslo.
- Western, A. 1930. 'Der Stein von Tune noch einmal'. *NTS* 4:287-93.
- Williams, H. 1990. *Ásrunan. Användning och ljudvärde i runsvenska stenskrifter*. (Runrön, 3.) Uppsala: Institutionen för nordiska språk, Uppsala universitet.
- Williams, H. 1992. 'Which came first, **Ṣ** or **Ṣ'**'. *ANF* 107:192-205.
- Wilmanns, W. 1906-09. *Deutsche Grammatik. Gotisch, Alt-, Mittel- und Neuhochdeutsch. III Flexion*. Strassburg: Trübner.
- Wimmer, L.F.A. 1905. 'De nasalerede vokaler og deres betegnelse i de danske runeindskrifter'. *ANF* 21:45-70.
- Wisén, T. 1872. *Homiliubók. Isländska homilier efter en handskrift från tolfte århundradet*. Lund: Gleerup.
- Wright, J. 1954. *Grammar of the Gothic Language*. 2nd edn, with supplement by O.L.Sayce. Oxford: Clarendon Press.